

TC-H5600

SERVICE MANUAL

AEP Model
UK Model
E Model




This unit is the cassette deck
for the MHC-5600 component system.

Model Name Using Similar Mechanism	TC-WR97ES/WR870
Tape Transport Mechanism Type	TCM-200R8

SPECIFICATIONS

Recoding system	4-track 2-channel stereo
Frequency response	(DOLBY NR OFF) 30 - 14,000 Hz (± 3 dB), using TYPE I cassette (Sony HF-S) 30 - 15,000 Hz (± 3 dB) using TYPE II cassette 30 - 16,000 Hz (± 3 dB) using TYPE IV cassette
Wow and flutter	0.06% WRMS $\pm 0.16\%$ (DIN)
Inputs	PHONO (phono jacks): sensitivity 5 mV impedance 47 kohms VIDEO (phono jacks) sensitivity 300 mV impedance 47 kohms

Design and specifications subject to change
without notice.

Dolby noise reduction manufactured under license from
Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol  are trademarks of
Dolby Laboratories Licensing Corporation.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may
be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around
270°C during repairing.
- Do not touch the soldering iron on the same conductor
of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when
soldering or unsoldering.





STEREO CASSETTE DECK
SONY[®]

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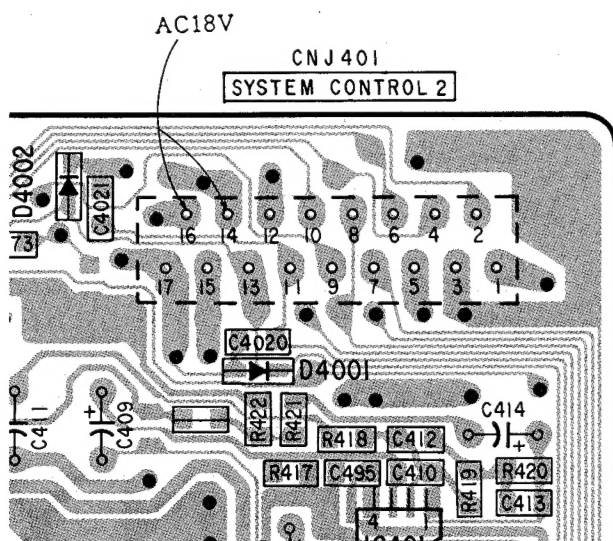
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SAFETY-RELATED COMPONENT WARNING!!

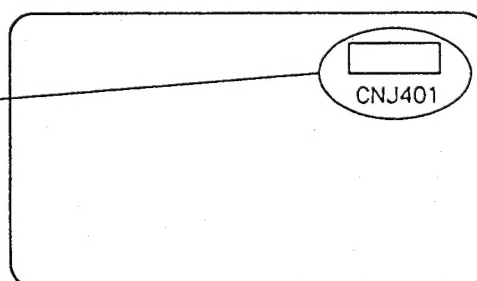
COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

Caution when repairing

Normally the power of this set is supplied from the TA-H5600 amplifier connected. When only this set is repaired, connect the power of 18V AC as shown in the figure below.



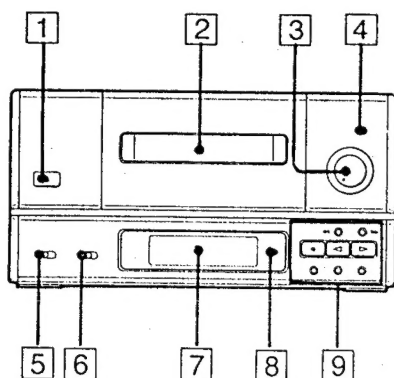
【PIN JACK BOARD】 (conductor side)



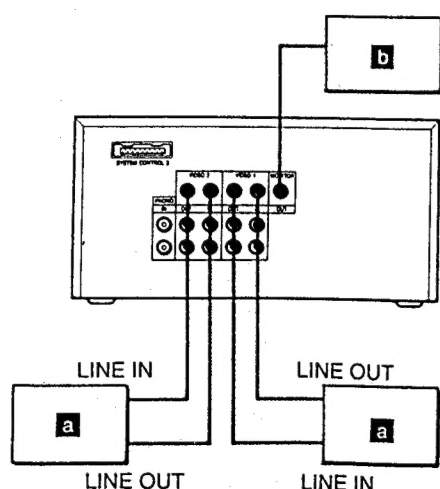
SECTION 1 GENERAL

This section is extracted from instruction manual.

LOCATION AND FUNCTION CONTROLS



- 1 OPEN/CLOSE button
- 2 Cassette holder
- 3 REC LEVEL (recording level) control
- 4 AUTO REC LEVEL (automatic recording level) button
- 5 DOLBY NR (Dolby Noise Reduction) button
- 6 DIRECTION MODE button
- 7 Display window
- 8 COUNTER RESET button
Resets the counter of the cassette deck to "0".
- 9 Tape operation buttons
 - : Fast winding
 - : Stop
 - : Forward play
 - : Reverse play
 - : PAUSE
 - : MUTE (Muting)
 - : REC (recording)

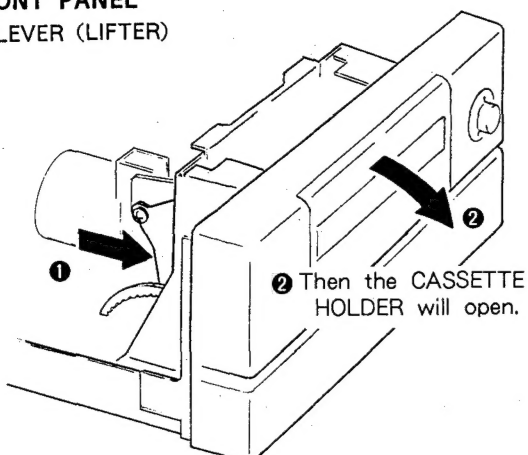


You can connect a VCR **a** to the VIDEO 1 or VIDEO 2 jacks. You can also connect a monitor TV **b** to MONITOR OUT. (TV with MONITOR IN jacks only.) To select VCR, press the VIDEO FUNCTION selector and light up the VIDEO 1 or VIDEO 2 indicator.

SECTION 2 DISASSEMBLY

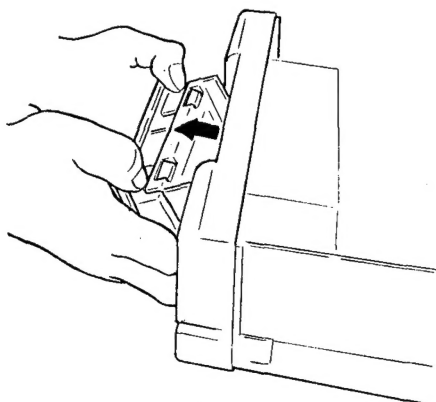
NOTE: Follow the disassembly procedure in the numerical order given.

• FRONT PANEL LEVER (LIFTER)

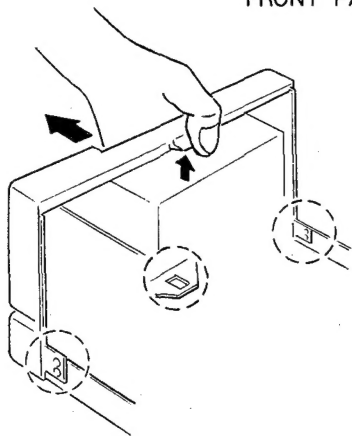


1 Push LEVER (LIFTER) in the direction of arrow 1.
(Refer to the item of CASSETTE HOLDER on page 5.)

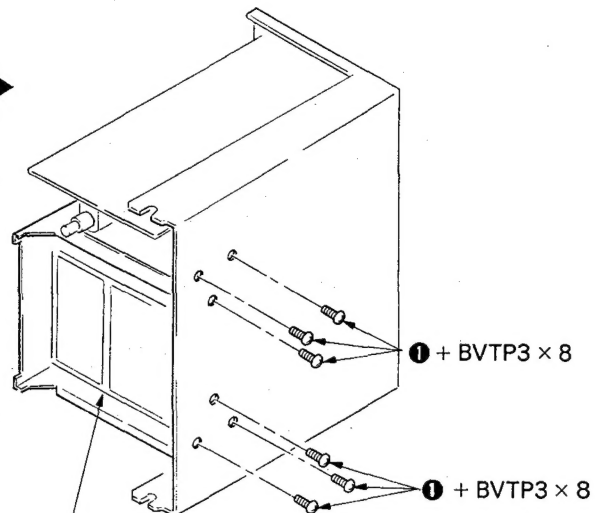
CASSETTE LID



FRONT PANEL

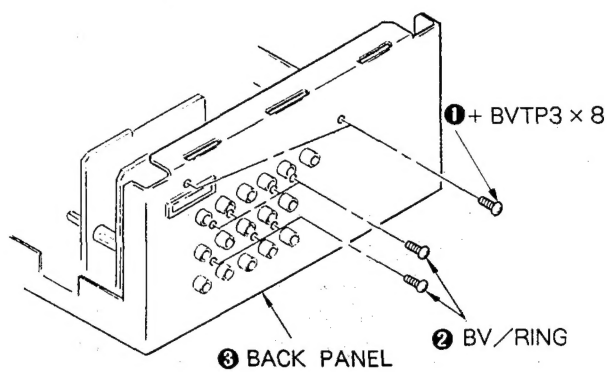


• MECHANISM DECK

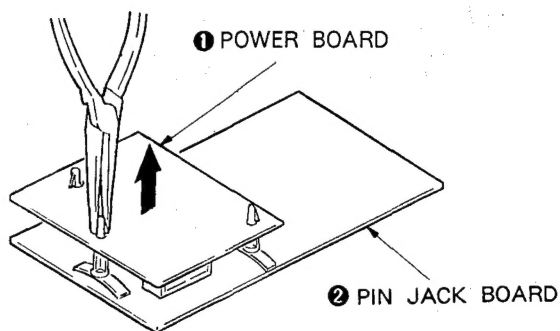


2 MECHANISM DECK

• PIN JACK/POWER BOARD

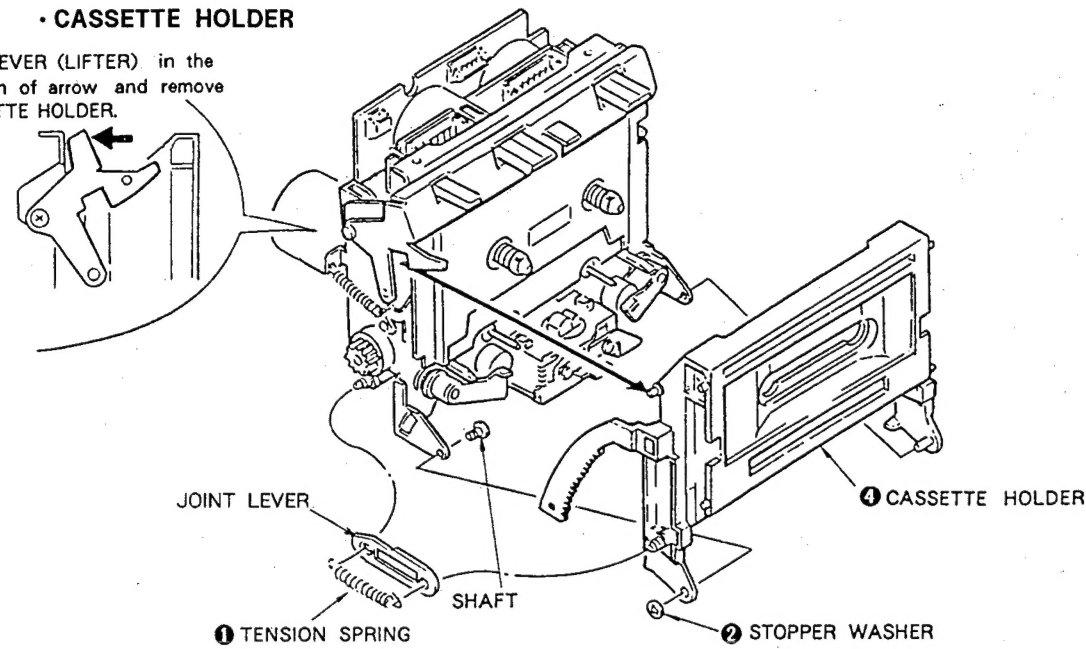


1 POWER BOARD



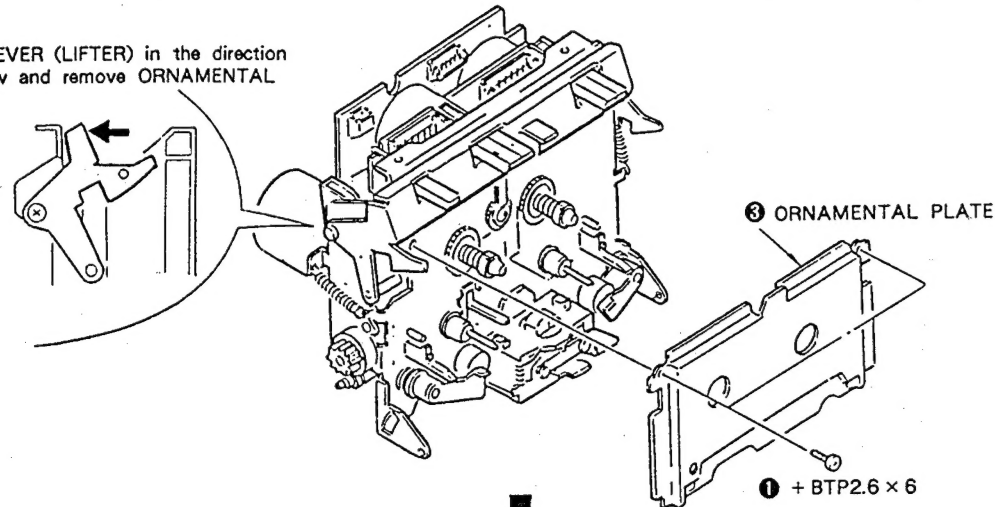
• CASSETTE HOLDER

- ③ Push LEVER (LIFTER) in the direction of arrow and remove CASSETTE HOLDER.

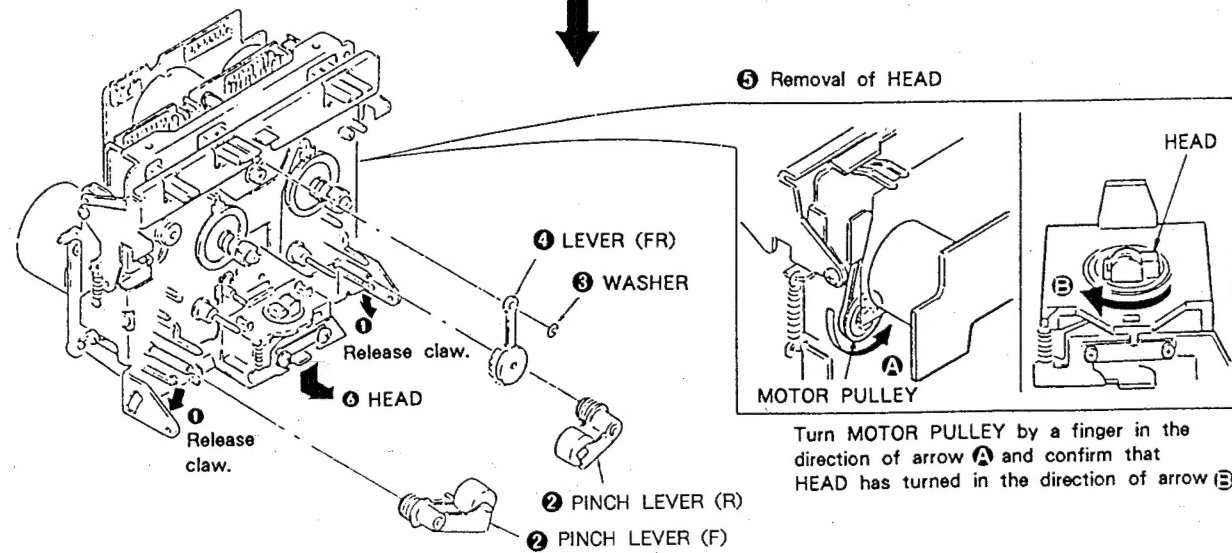


• ORNAMENTAL PLATE

- ② Push LEVER (LIFTER) in the direction of arrow and remove ORNAMENTAL PLATE.

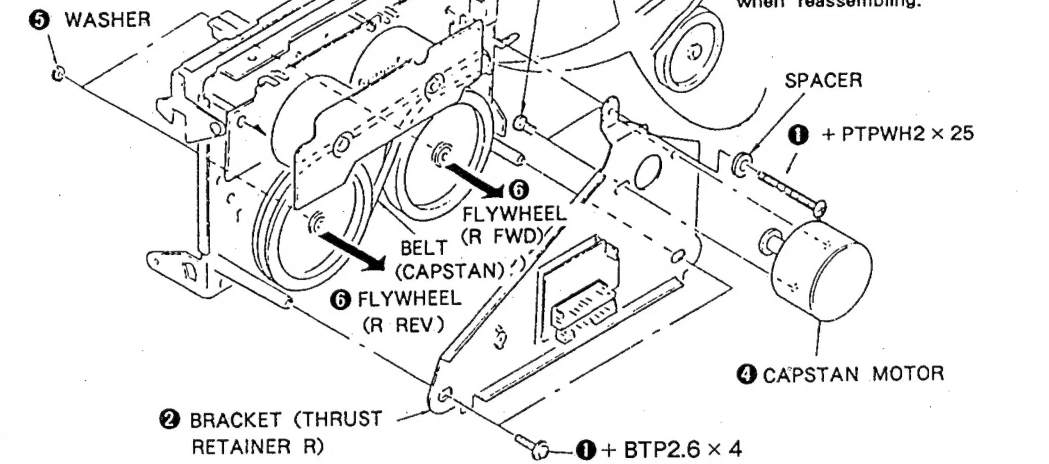


• PINCH LEVER/HEAD

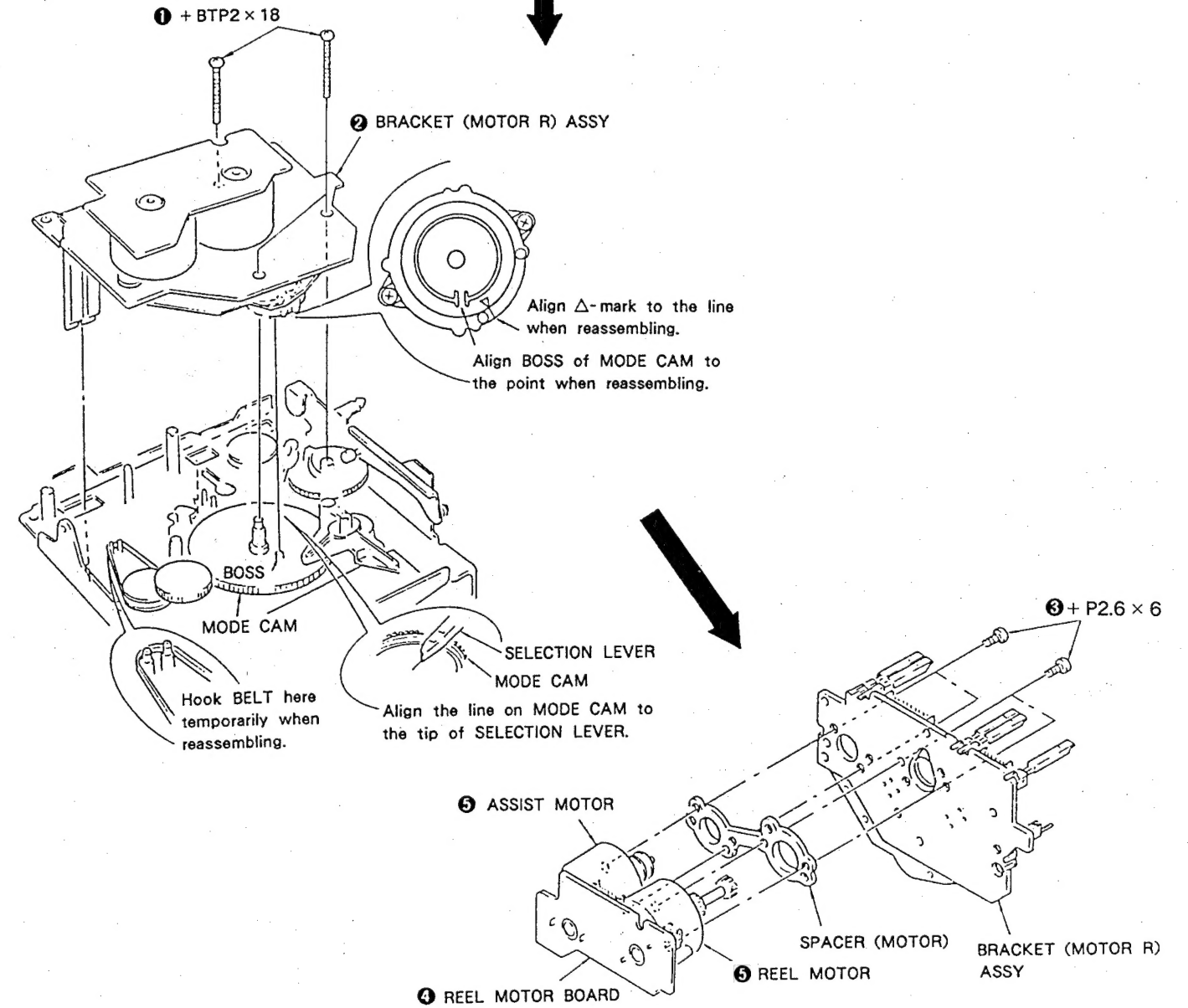


CAPSTAN MOTOR/FLYWHEEL

- ③ SCREW, FITTING REINFORCEMENT



REEL and ASSIST MOTORS



SECTION 3 MECHANICAL ADJUSTMENTS

PRECAUTION

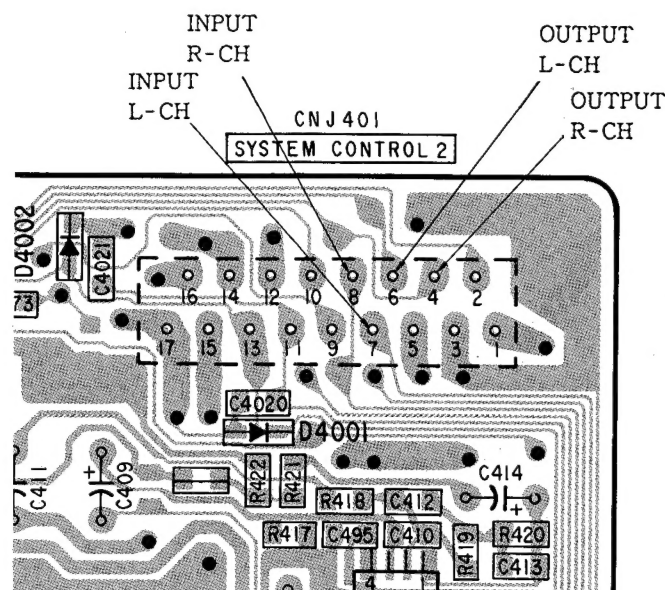
- Clean the following parts with a denatured alcohol-moistened swab:

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers
- Demagnetize the record/playback head with a head demagnetizer.
(Head demagnetizer do not approach for the erase head.)
- Do not use a magnetized screwdriver for the adjustment.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	30 to 60g·cm (0.42 to 0.83 oz·inch)
Forward back tension	CQ-102C	1 to 5g·cm (0.014 to 0.069 oz·inch)
Reverse	CQ-102RC	30 to 60g·cm (0.42 to 0.83 oz·inch)
Reverse back tension	CQ-102RC	1 to 5g·cm (0.014 to 0.069 oz·inch)
Forward, Reverse	CQ-201B	65 to 90g·cm (0.9 to 1.25 oz·inch)

LINE IN/OUT Terminal (CNJ401)



SECTION 4 ELECTRICAL ADJUSTMENTS

PRECAUTION

- The adjustment should be performed in the publication.
(Be sure to make playback adjustment at first.)
- The adjustment and measurement should be performed for both L-CH and R-CH.
 - Switch position
DOLBY NR switch : OFF
DIR MODE switch : \rightleftharpoons

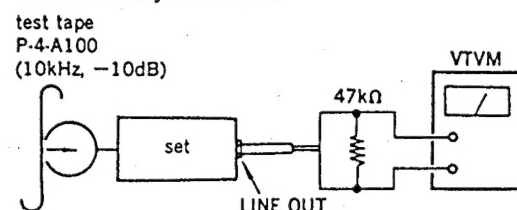
Test Tape

Tape	Contents	Use
P-4-A100	10kHz, -10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

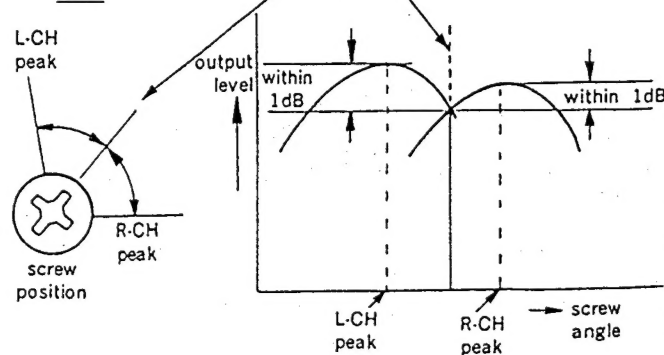
Record/Playback Head Azimuth Adjustment

Procedure:

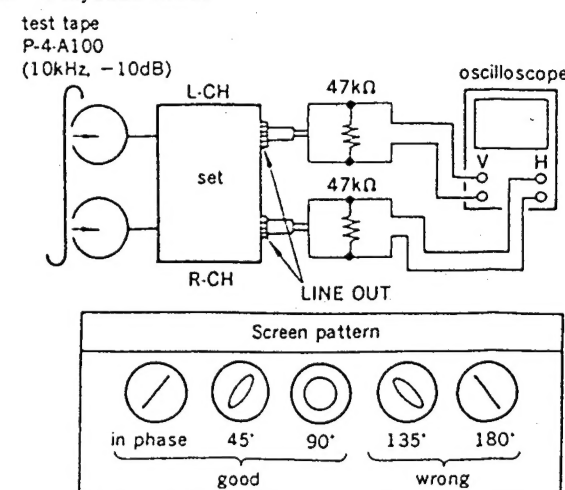
- Forward Playback Mode



- Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.

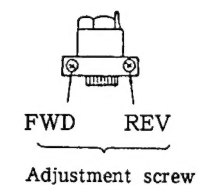


- Playback Mode



- Change the reverse playback mode and repeat the steps 1 to 3.
- After the adjustment, lock the adjustment screw with suitable locking compound.

Adjustment Location : - record/playback head -

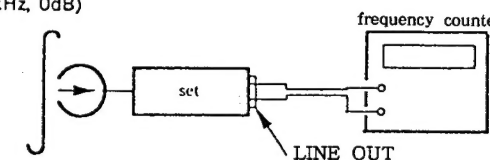


Tape Speed Adjustment

Procedure:

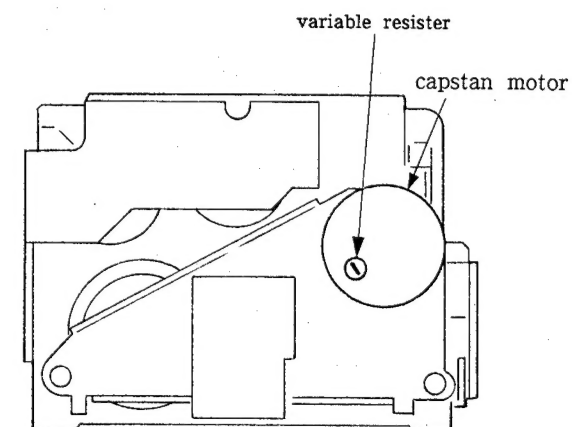
- Forward Playback Mode -

test tape
WS-48B
(3kHz, 0dB)



- Set to FWD playback mode.
- Adjust motor rear side (variable resistor) so that the frequency counter reading becomes $3,000 \pm 15\text{Hz}$.

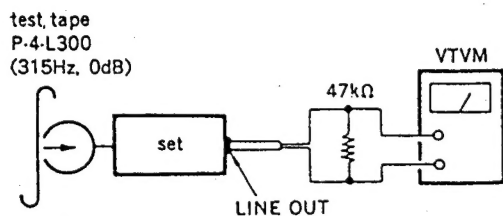
Adjustment Location : - capstan motor -



Playback Level Adjustment

Procedure:

—Forward Playback Mode—



Adjustment RV101 (L-ch) and RV201 (R-ch) so that the reading on VTVM meets the adjustment limits below.

Adjustment Limit:

LINE OUT level: $-10 \pm 0.5\text{dB}$ (0.23 to 0.26V)

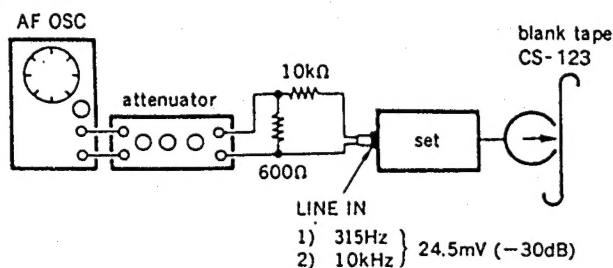
Level Difference between Channels: within 0.5dB

Confirm the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

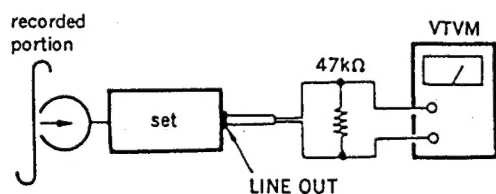
Record Bias Adjustment

Procedure:

1. Record Mode



2. Playback Mode



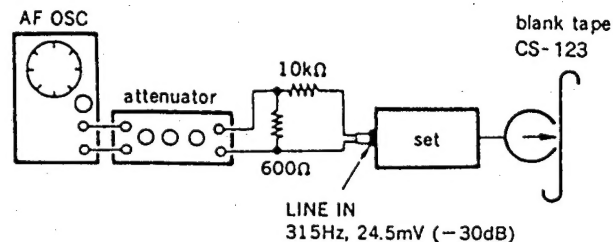
Playback the signal recorded in step 1.

Confirm that the 10kHz playback output is $0 \pm 0.5\text{dB}$ relative to the 315Hz output. If necessary, adjust RV103 (L-CH), RV203 (R-CH) and repeat the steps given above.

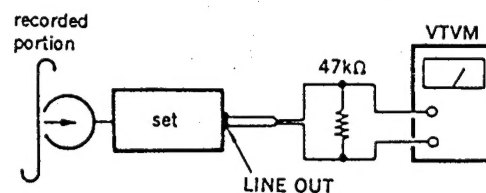
Record Level Adjustment

Procedure:

1. Record Mode



2. Playback Mode



Confirm playback the tape recorded become adjustment level as follows.

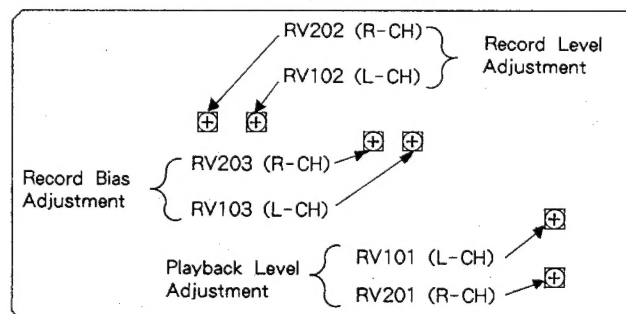
If necessary, adjust RV102 (L-CH), RV202 (R-CH) and repeat steps 1 and 2.

Adjustment Limits:

LINE OUT level: $-30 \pm 0.5\text{dB}$ (23 to 26mV)

Adjustment Location:

【MAIN (B) BOARD】 — component side —



SECTION 5

DIAGRAMS

5-1. IC PIN DESCRIPTION

IC601 display microprocessor HD614023FA89

Fluorescent lamp indicator is activated by receiving data from IC702 (system controller).

Pin	Pin Name	I/O	Description
1~11	k-a	O	FL indicator tube(FL601)segment output.
12			Not used(+5.6 V).
13	VDISP	—	Power supply for activating the FL indicator tube(-22 V).
14~25		I	Not used(GND).
26	Vcc	—	Power supply terminal(+5.6 V).
27	CLK	I	Data transmission clock input from IC702(system controller).
28	DATA	I	Serial data input from IC702(system controller).
29	SYNC	I	Sync signal input which indicates the first byte of data sent from IC702(system controller).
30			Not used(GND).
31	SAF	O	LED(D601)light output in the AUTO REL LEVEL.
32~35		O	Not used.
36~42			Not used(GND).
43	RESET	I	Reset input from IC702(system controller). "L": Reset.
44	TEST	I	Not used(+5.6V).
45	OSC1	I	Clock input(4.19MHz).
46	OSC2	O	Clock output.
47	GND	—	Power supply terminal(GND).
48~50			Not used(GND).
51			Not used(Pull-up).
52			Not used.
53~57	1G-5G	O	FL indicator tube(FL601)grid output.
58~59		O	Not used.
60~64	p-1	O	FL indicator tube(FL601)segment output.

IC406 selector controller M50760-315FP

AV output is switched with the audio bus signal sent from the amplifier (TA-H5600).

Pin	Pin Name	I/O	Description
1	D3	I	Model selection input port. Connected to GND.
2	A0	O	Audio IN switch(IC403 and IC404)control output port.
3			Not used.
4	A1	O	Audio IN switch(IC403 and IC404)control output port.
5	CNVss	—	Power supply terminal(GND).
6	Vss	—	Power supply terminal(GND).
7	A2	O	Audio IN switch(IC403 and IC404)control output port.
8	B0	O	Audio OUT switch(IC405)control output port.
9	B1	O	Audio OUT switch(IC405)control output port.
10			Not used.
11	V0	O	Video IN/OUT switch(IC407)control output port.
12	V1	O	Video IN/OUT switch(IC407)control output port.
13~14			Not used(GND).
15			Not used.
16	RESET	I	Reset input. "L": Reset
17	XOUT	O	Clock output.
18	XIN	I	Clock input.
19	S	I	Serial data input(audio bus).
20	D0	I	Serial data input(audio bus).
21	D1	I	Model selection input port. Connected to +5 V(pull up).
22			Not used.
23	D2	I	Model selection input port. Connected to GND.
24	V _{DD}	—	Power supply terminal(+5 V).

IC702 system controller M50944-155SP

The system is wholly controlled by communication between IC601 (display microprocessor) and IC701 (mechanism controller).

Pin No.	Pin Name	I/O	Description
1	VREF	I	A/D input port reference voltage input(+5.6 V).
2	MET - R	I	Level meter Rch input(analog)from the meter amplifier(IC305).
3	MET - L	I	Level meter Lch input(analog)from the meter amplifier(IC305).
4	VOL A/D	I	REC LEVEL VOLUME(RV301)position detect input(analog).
5		—	Not used.
6	KEY4	I	Key switch input(analog).
7	KEY3	I	Key switch input(analog).
8	KEY2	I	Key switch input(analog).
9	KEY1	I	Key switch input(analog).
10	SYNC	O	Sync signal output which indicates the first byte of data sent to IC601.
11	FL SK	O	Data transmission clock output to IC601.
12	FL SO	O	Serial data output to IC601.
13	AUB OUT	O	Audio bus output.
14	AUB IN	I	Audio bus output(negative edge).
15	POW IN	I	Not used(pull up).
16	PB SEL	O	Not used(open).
17	AMS SEL	O	Not used(open).
18	MD REQ	I	Data request input from IC701.
19	MD SCLK	O	Data transmission clock output to IC701.
20	MD SO	O	Serial data output to IC701.
21	MD SI	I	Serial data input from IC701.
22	RES OUT	O	Reset signal output to IC601.
23		—	Not used(open).
24	AUB IN	I	Audio bus input(positive edge).
25		—	Not used(open).
26	GND	—	Power supply terminal(GND).
27	RES	I	System reset input. "L": Reset.
28	XIN	I	Clock input(4 MHz).
29	XOUT	O	Clock output.
30,31		—	Not used(open).
32	Vss	—	Power supply terminal(GND).
33	φ	—	Not used(open).
34	TEST 2	I	Test mode setting input. This set enters into the test mode when the power is on and it is set to "L"(CNP703 is shortened)*1
35	TEST 1	I	Not used(GND).
36,37	VERSEL	I	Not used(+5.6 V).
38		—	Not used(open).
39	POW ON	I	Not used(GND).
40	VOL LED	O	Volume LED ON/OFF output. "L": light up.
41	VOL -	O	Volume moter(RV301)down control output for IC706.
42	VOL +	O	Volume moter(RV301)up control output for IC706.
43	VOL SPD	O	Volume moter speed control output. "H": SLOW, "L": FAST.
44~47		O	Not used(open).
48	BIAS 4	O	Tape bias select output. "L": Metal.
49	BIAS 2	O	Tape bias select output. "L": CrO2.
50	BIAS 1	O	Tape bias select output. "L": Normal.
51	RMUTE	O	REC mute control output.
52		O	Not used(open).
53	RELAY	O	Mechanism deck head switch control output. "L": Relay on.
54		O	Not used(open).

Pin No.	Pin Name	I/O	Description
55	B/C	O	Dolby B/C control output. "L": Dolby C, "H": Dolby B.
56	ON/OFF	O	Dolby ON/OFF control output. "C": ON, "H": OFF
57	REC/PB	O	Dolby amplifier REC/PB control output. "L": REC, "H": PB.
58	PB70 μ s	O	Playback equalizer characteristic switch output. "H": Normal, "L": CrO2 or Metal.
59	AMS IN	O	Signal input from the AMS amplifier(IC304). With music: "H", No music: "L".
60	AMS/BS	O	Not used.
61	PASS	O	Not used(connect to 62 pin).
62	L MUTE	O	Line mute control output. "H": MUTE.
63	AVcc	O	Power supply terminal(+5.6 V).
64	Vcc	O	Power supply terminal(+5.6 V).

*1 Test mode

When the power is on and pin ④ is set to "L"(CNP703 is shortened.), the set enters the electrical adjustment test mode and the followings can be available.

(2) Recording memory

Recording memory is set to ON when the tape counter is reset at the record start point.

(1) Source monitor

Recording signals can be monitored through the LINE OUT terminal(see page 7) because the line short is removed in recording.

IC701 mechanism controller M50747-B83SP

The mechanism deck is controlled by receiving data from IC702 (system controller).

Pin No.	Pin Name	I/O	Description
1	Vcc	—	Power supply terminal(+5.6 V).
2	BCTRQ	O	Assist motor torque control output. { "H": Large torque
3	SPEED	O	Not used(open). { "L": Small torque
4	TYPE 1	O	REC EQ select output. NORMAL tape: "H"
5	TYPE 2	O	REC EQ select output. CrO2 tape: "H"
6~9		O	Not used.
10	REVTAB	I	REC switch(reverse:S1009)input. "H": When REC claw is broken.
11	70 μ s	I	70 μ s switch(S1008)input. "H": 70 μ s, "L": 120 μ s(time constant of playback EQ).
12	METAL	I	METAL switch(S1007)input. "H": METAL tape, "L": NORMAL or CrO2 tape.
13	HALF	I	HALF switch(S1006)input. "L": When a tape is mounted.
14	S REEL	I	Supply reel base sensor(IC1001)input.
15	T REEL	I	Take-up reel base sensor(IC1002)input.
16,17		I	Not used(GND).
18		—	Not used(open).
19	SCLK	I	Data transmission clock input from IC702.
20	SO	O	Serial data output to IC702.
21	SI	I	Serial data input from IC702.
22	REQ	O	Data request output to IC702.
23~25		—	Not used(open).
26	INT	I	Not used(+5.6 V).
27	CN Vss	—	Power supply terminal(GND).
28	RES	I	Reset input. "L": Reset.
29	XIN	I	Clock input(4 MHz).
30	XOUT	O	Clock output.
31	ϕ		Not used.
32	Vss	—	Power supply terminal(GND).
33~50			Not used.

Pin No.	Pin Name	I/O	Description
51	ASSIST1	O	Head base is "H" when turned to the FWD direction.) *1
52	ASSIST2	O	
53	REEL 1	O	Reel motor rotation control output. Reverse: "H") *2
54	REEL 2	O	
55	TQ1	O	Reel motor torque control output. PLAY: "H") *3
56	TQ2	O	
57~60	CAM1-4	I	Rotary encoder input to detect the position of the head base of the mechanical block. *4
61	OPEN	I	OPEN switch(S1004) input. "L": When the cassette holder completely opens.
62	CLOSE	I	CLOSE switch(S1003) input. "L": When the cassette holder completely closed.
63	DOOR	I	DOOR switch(S1002) input. "L": When the cassette holder is driven from open to close state.
64	FWDTAB	I	REC switch (forward: S1005) input. "H": When REC claw is broken.

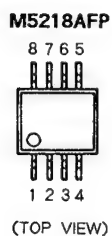
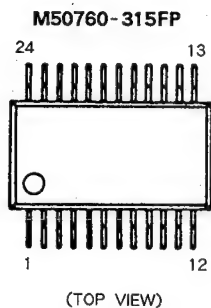
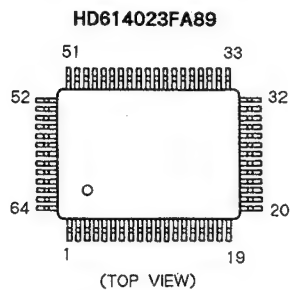
*1		STOP	Turn to FWD direction	Turn to RVS direction	STOP
	ASSIST 1	L	H	L	H
	ASSIST 2	L	L	H	H

*2		STOP	FWD/CLOSE	REV/OPEN	BRAKE
	REEL 1	L	L	H	H
	REEL 2	L	H	L	H

*3		OPEN/CLOSE (large torque)	FF/REW (medium torque)	PLAY (small torque)	INHIBIT
	TQ 1	L	L	H	H
	TQ 2	L	H	L	H

*4		Forward					Reverse			
		FWD PLAY	AMS/PAUSE	STOP	FF/REW	EJECT	FF/REW	STOP	AMS/PAUSE	RVS PLAY
	CAM1	H	H	L	H	L	H	L	H	H
	CAM2	H	L	H	H	L	H	H	L	H
	CAM3	H	H	H	H	H	L	L	L	L
	CAM4	H	H	H	L	L	L	H	H	H

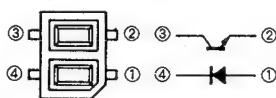
5-2. SEMICONDUCTOR LEAD LAYOUTS



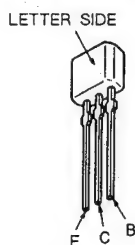
DTA114ES
DTA144ES
DTC114ES
DTC143TS
DTC144ES
2SA1344



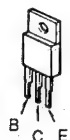
GP2S22B



2SA1317-STN
2SD1012-FG



2SB1094-L
2SD2012



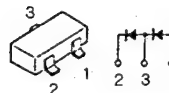
2SC945-P
2SC3330-T



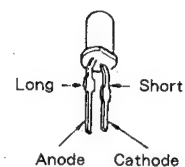
2SD774-34



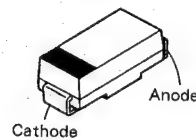
DCA010



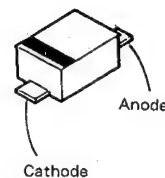
SEL2210S-C



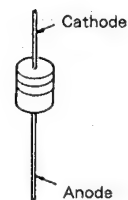
EC10DS2



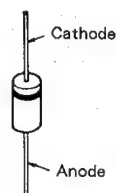
1SS355



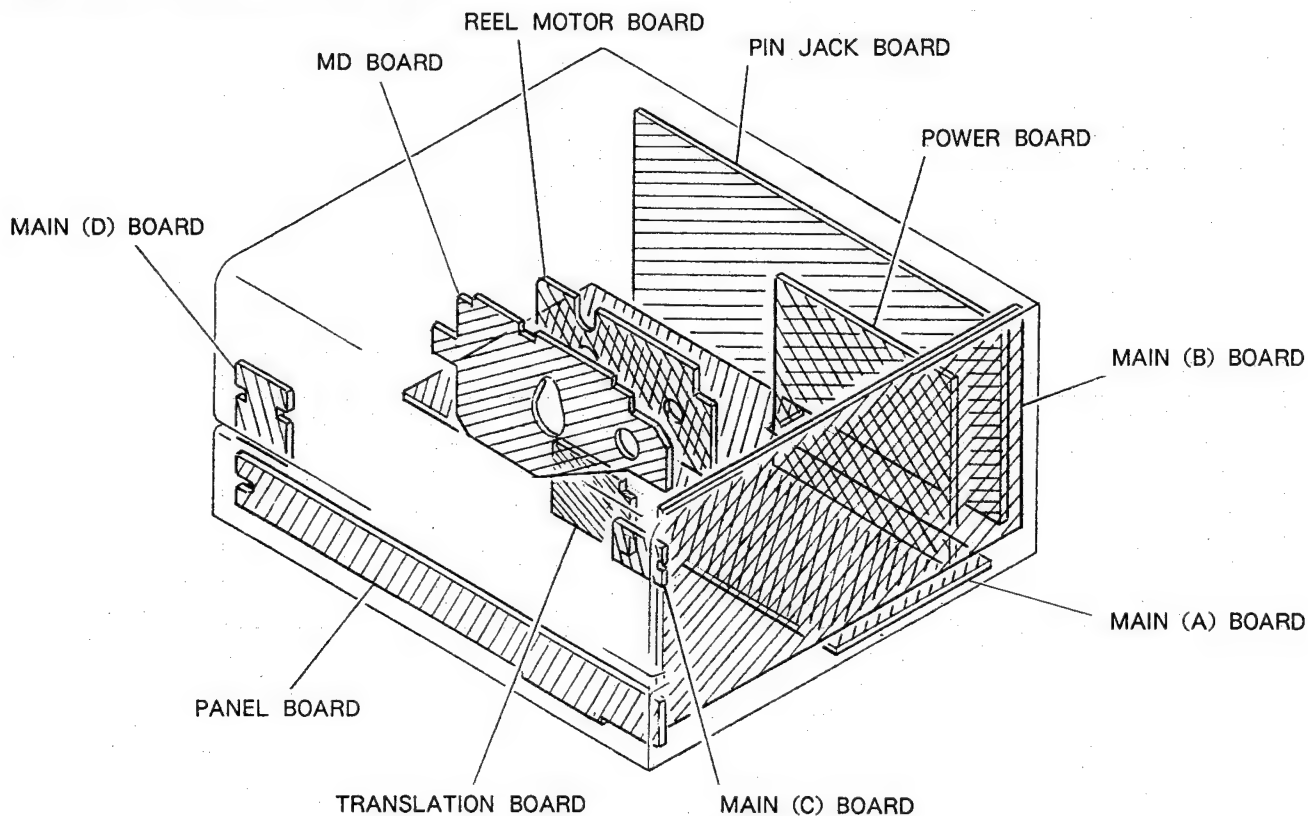
HZS7C2L
RD5.6ESB2
1SS120



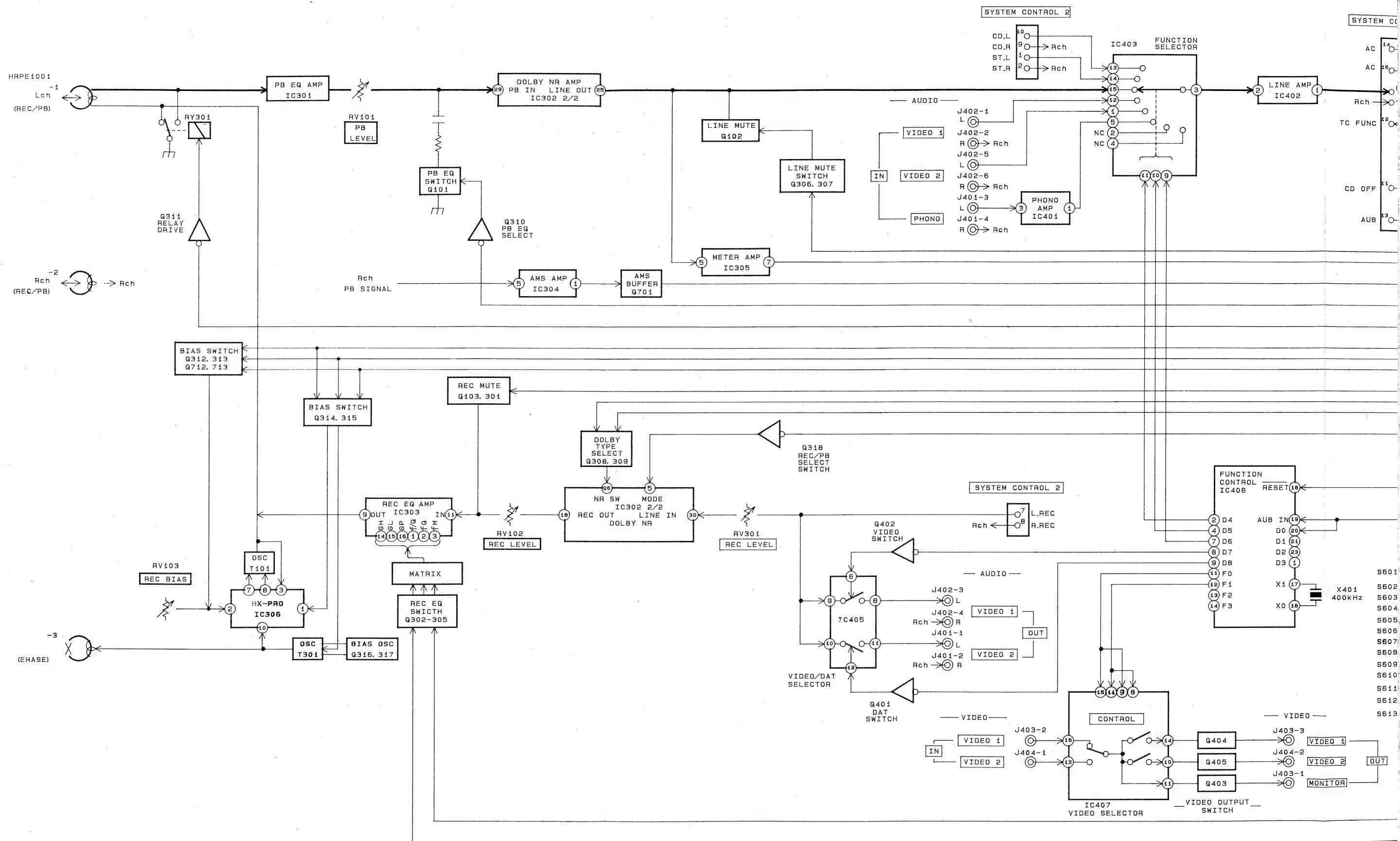
10E2N



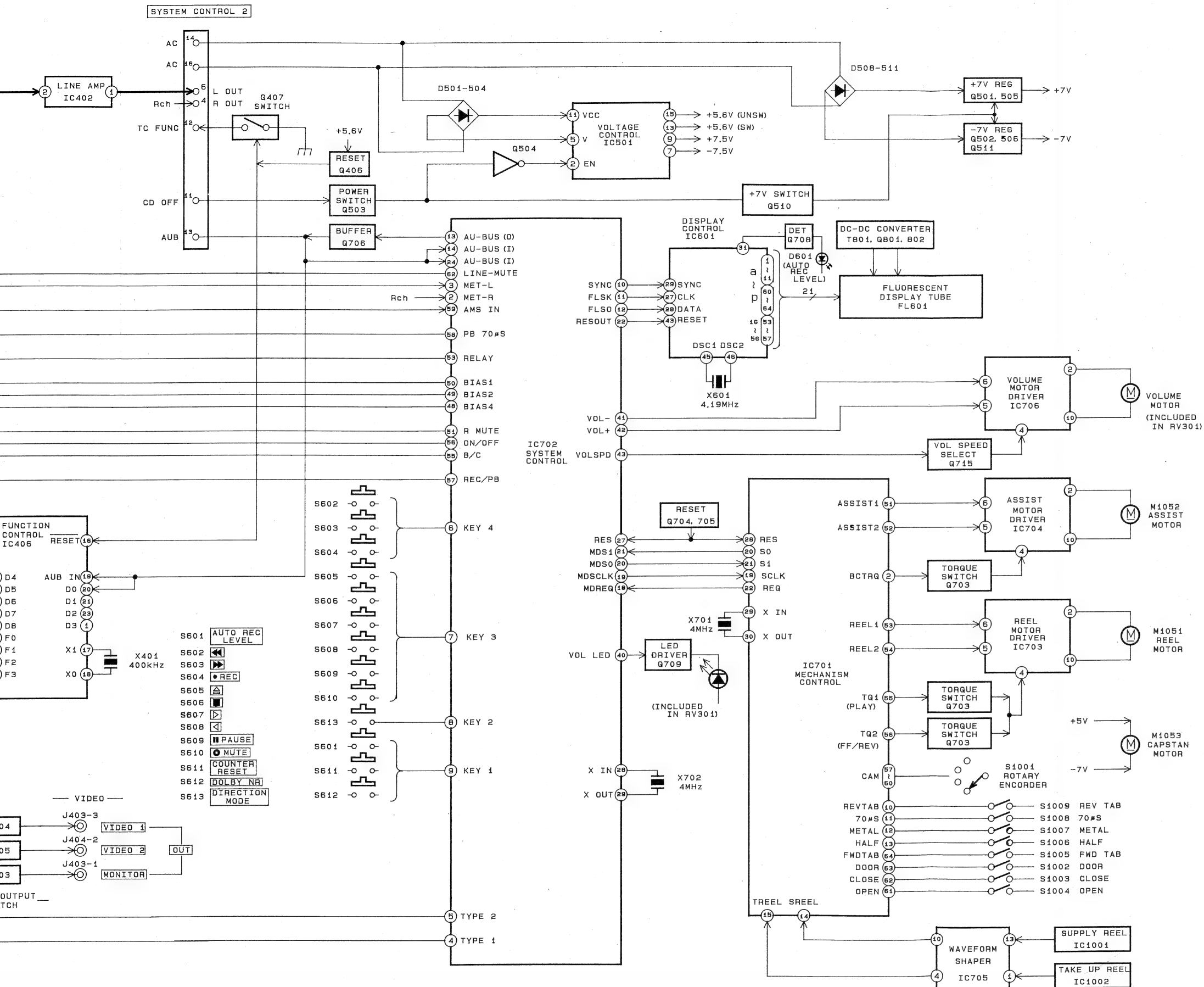
5-3. CRICUIT BOARDS LOCATION



5-4. BLOCK DIAGRAM

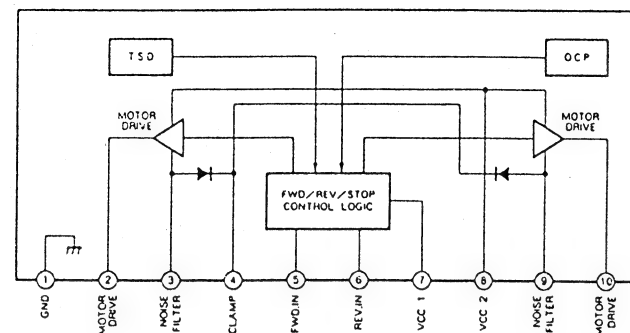


16

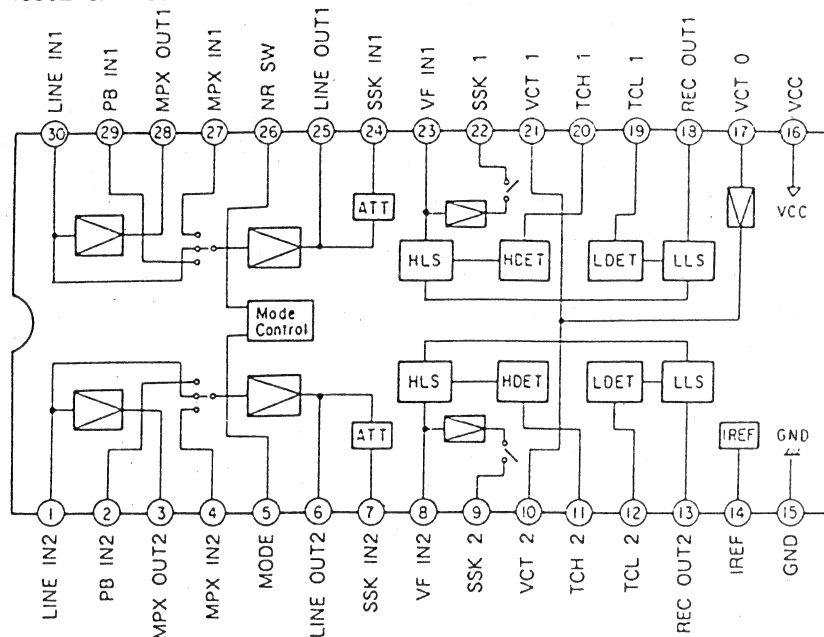


• IC BLOCK DIAGRAM

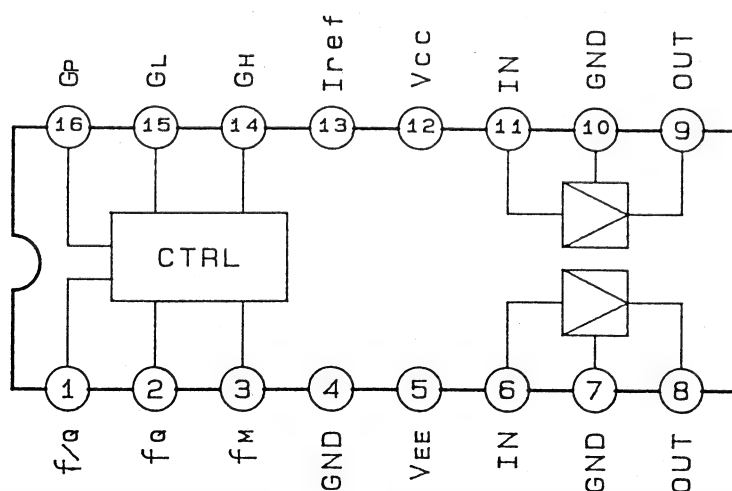
IC703,706 BA6219B
IC704 LB1641



IC302 CXA1330S



IC303 CXA1198AP



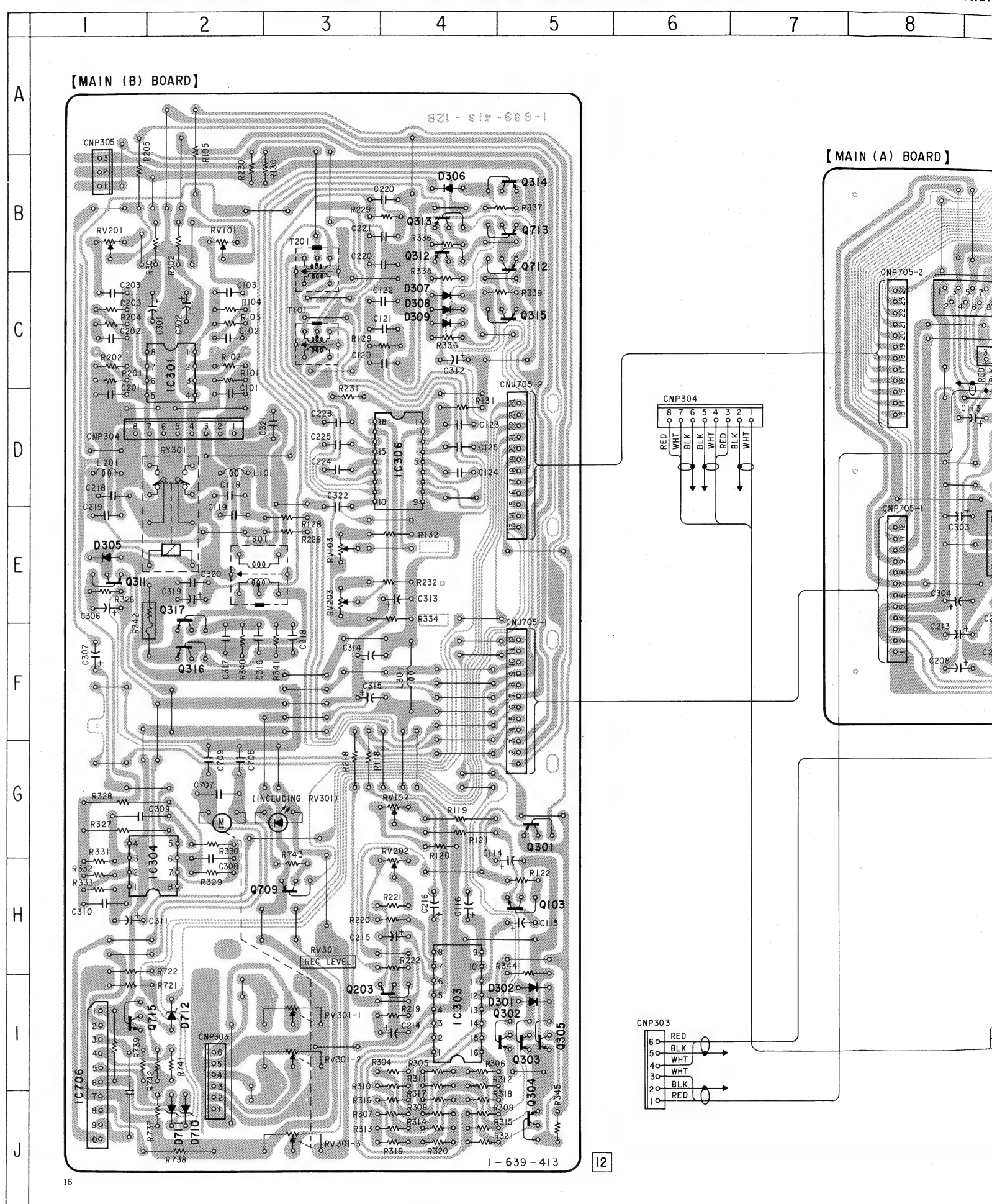
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	C-12	Q306	D-11
D201	C-13	Q307	E-11
D301	I-5	Q308	F-11
D302	I-5	Q309	E-11
D303	E-11	Q310	E-11
D304	E-11	Q311	E-1
D305	E-1	Q312	B-4
D306	B-4	Q313	B-4
D307	C-4	Q314	B-5
D308	C-4	Q315	C-5
D309	C-4	Q316	F-2
D601	A-20	Q317	E-2
D701	C-17	Q318	F-11
D702	C-17	Q701	F-13
D703	E-12	Q702	F-13
D704	E-12	Q703	E-13
D705	F-12	Q704	D-17
D706	F-12	Q705	C-17
D707	E-14	Q706	C-15
D708	E-14	Q707	C-17
D709	E-13	Q708	B-19
D710	J-2	Q709	H-3
D711	J-2	Q712	B-5
D712	I-2	Q713	B-5
D713	C-15	Q715	I-1
D714	C-17	Q801	B-13
D720	C-10	Q802	B-11
D721	C-11		
D722	C-12		
D750	B-13		
D751	D-14		
D752	B-19		
D753	A-19		
D801	D-16		
D802	C-15		
D803	C-15		
D804	C-14		
D805	C-14		
IC301	C-2		
IC302	E-9		
IC303	I-4		
IC304	H-2		
IC305	D-13		
IC306	D-4		
IC701	E-16		
IC702	B-15		
IC703	E-13		
IC704	D-13		
IC705	D-15		
IC706	I-1		
IC1001	H-18		
IC1002	H-19		
Q101	D-10		
Q102	D-11		
Q103	H-5		
Q201	F-10		
Q202	D-11		
Q203	I-4		
Q301	G-5		
Q302	I-5		
Q303	I-5		
Q304	J-5		
Q305	I-5		

Note on Mounting Diagram:

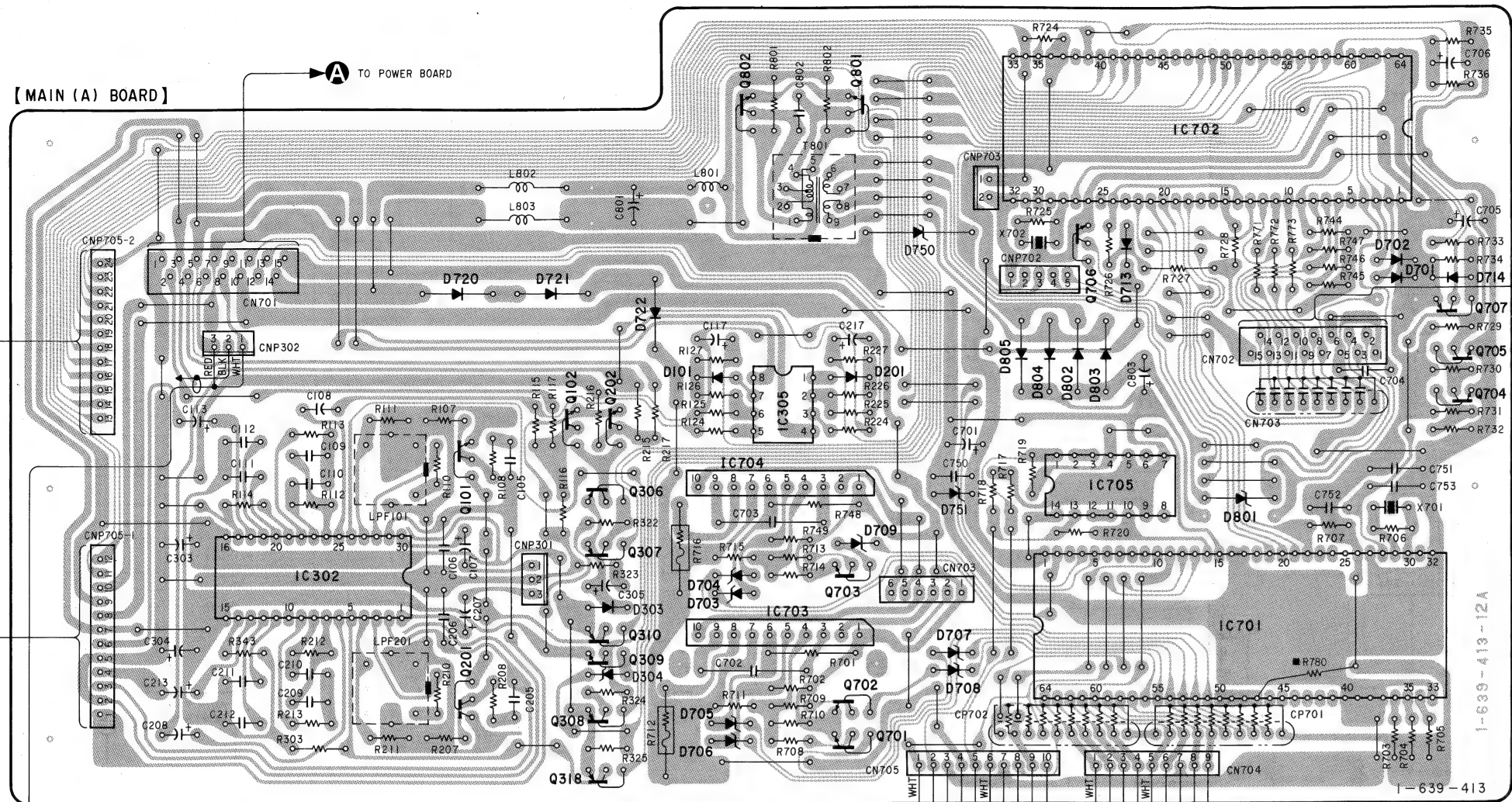
- ○ : parts extracted from the component side.
- ■ : parts mounted on the conductor side.

5-5. PRINTED WIRING BOARDS - MAIN SECTION - • See page 14 for Semiconductor Lead Layouts and Circuit Boards Location

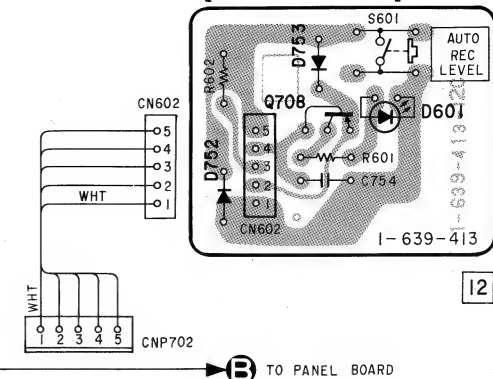


7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----

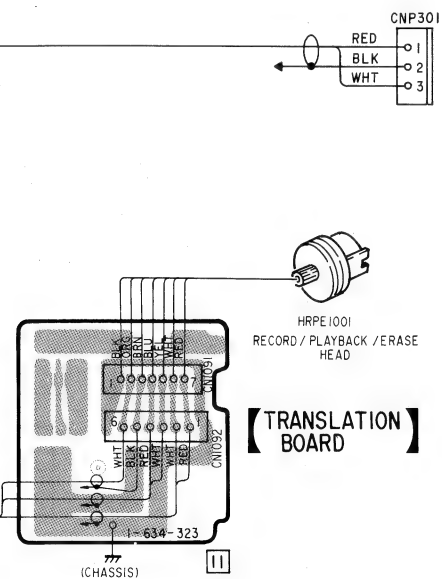
【MAIN (A) BOARD】



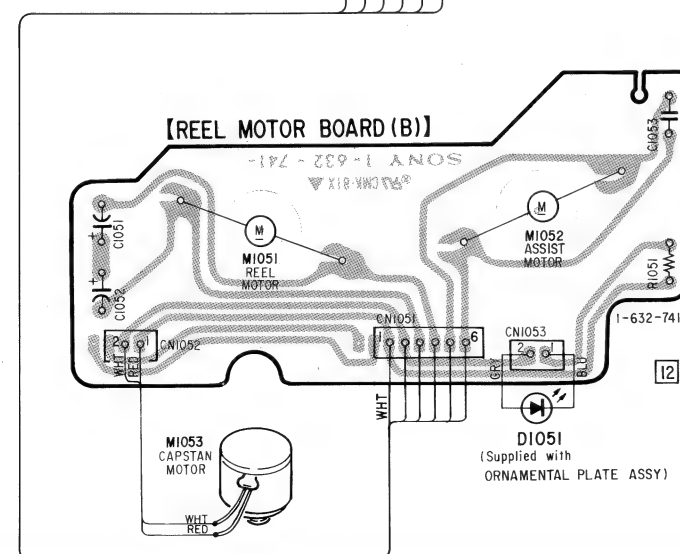
【MAIN (C) BOARD】



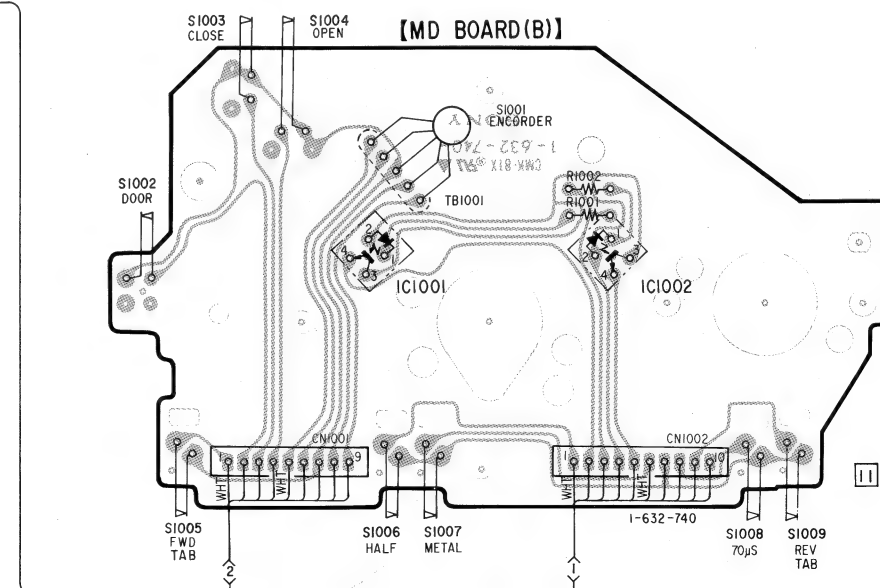
【TRANSLATION BOARD】



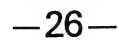
【REEL MOTOR BOARD (B)】



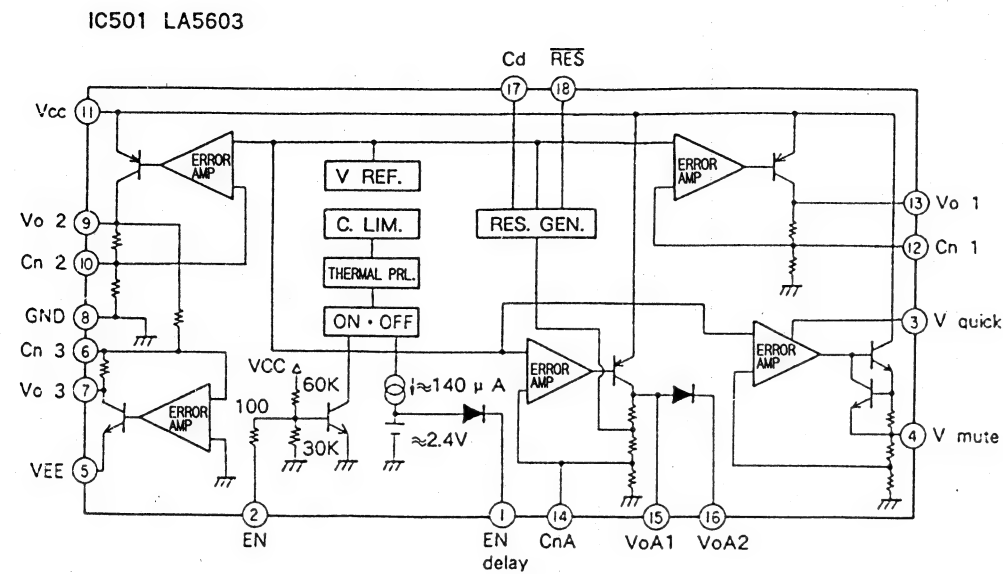
【MD BOARD (B)】



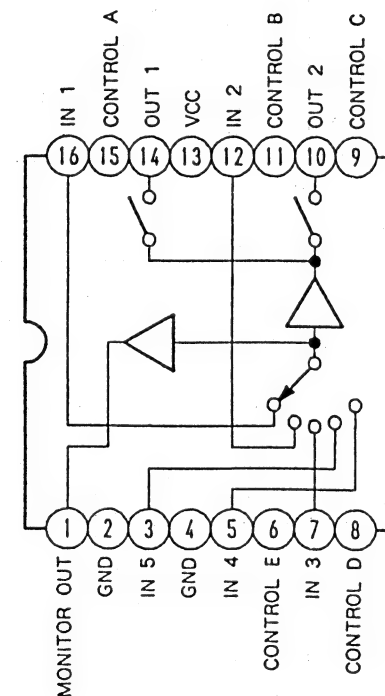




• IC BLOCK DIAGRAM



IC407 BA7625



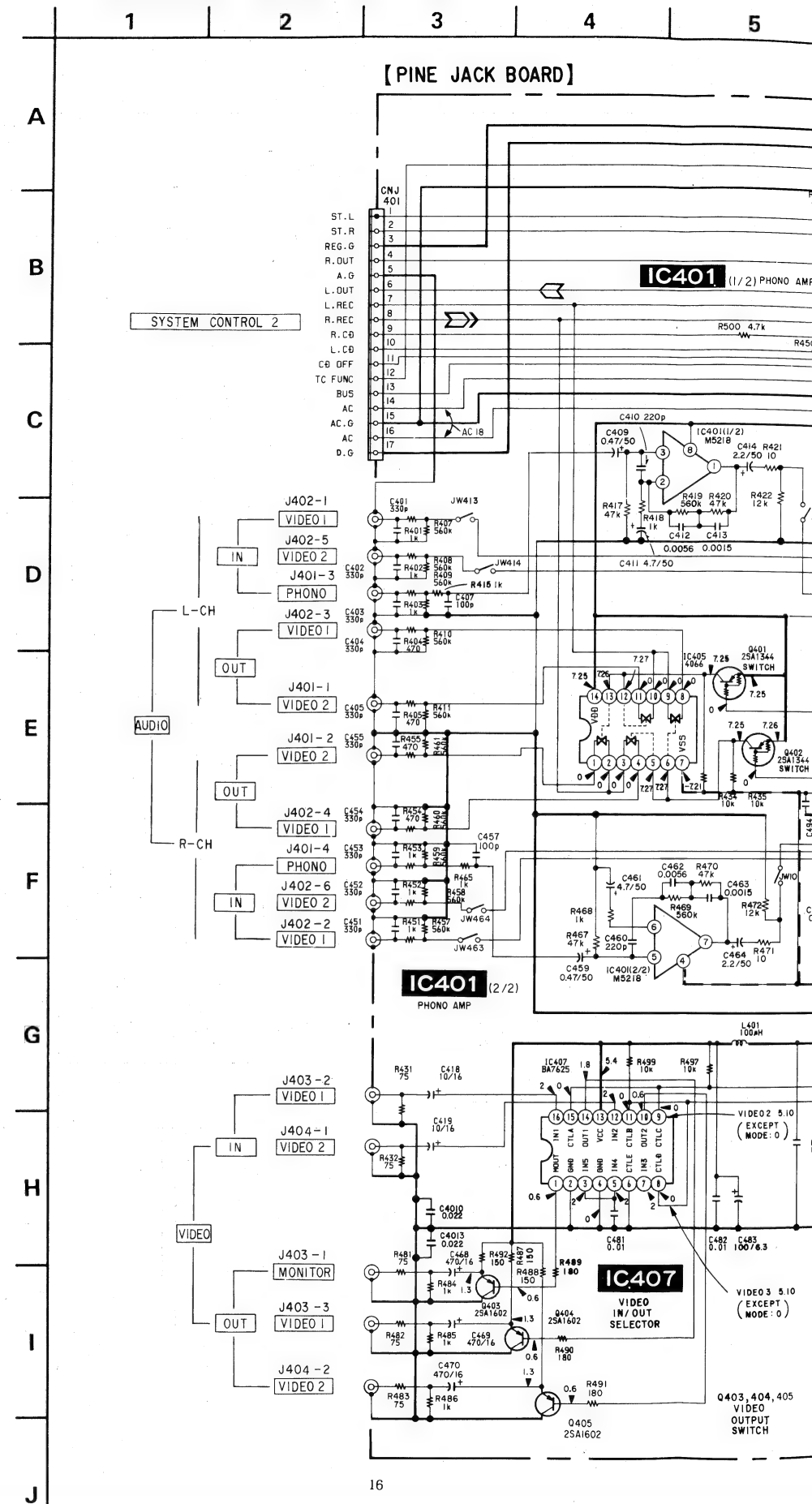
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- : fusible resistor.

Note:
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

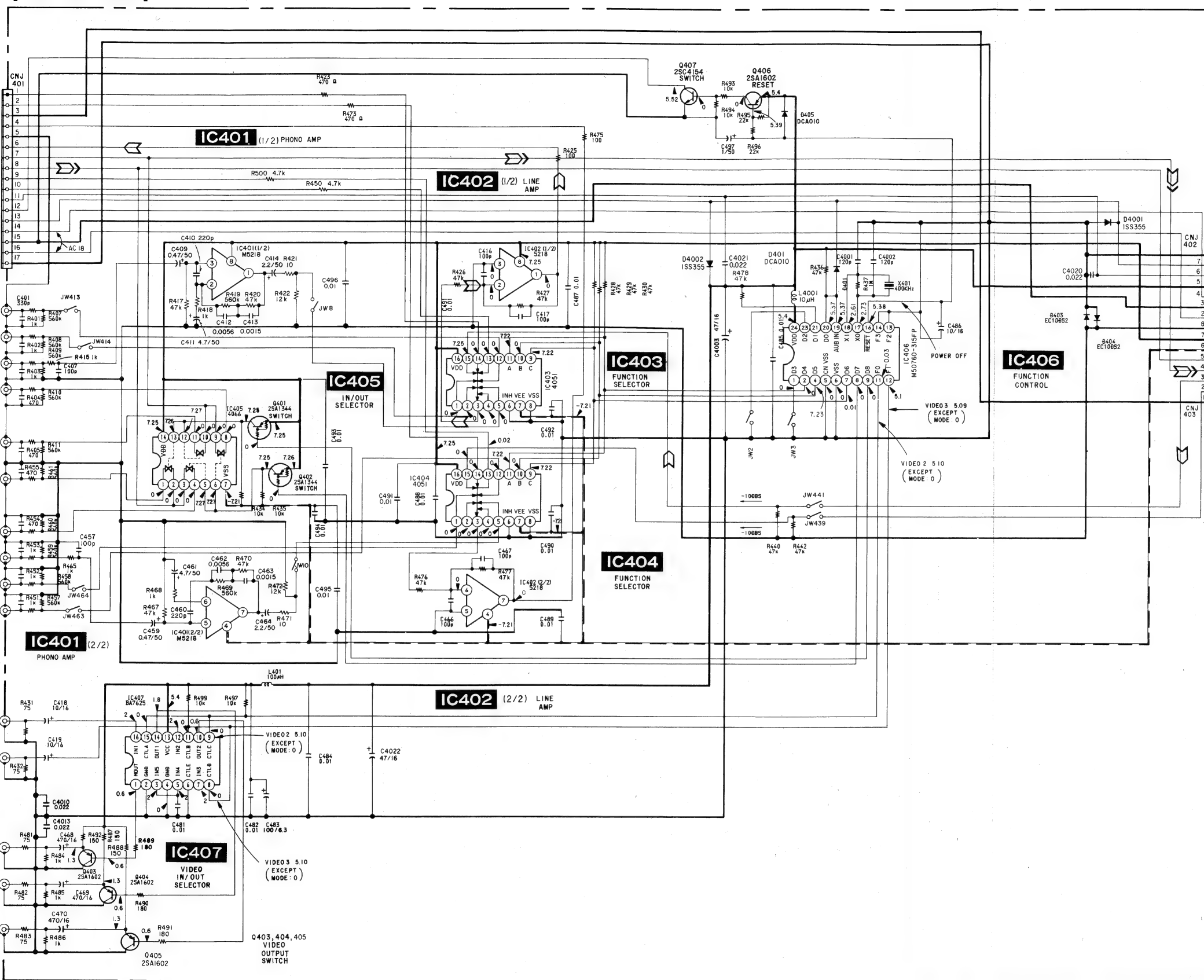
- : B+ Line
- : B- Line
- : adjustment for repair.
no mark: STOP
(): PB
< > : REC
- Voltages are taken with a VOM (50 $\text{k}\Omega/\text{V}$).
Voltage variations may be noted due to normal production tolerances.
- Signal path.
 : PB
 : REC

5-7. SCHEMATIC DIAGRAM - PIN JACK SECTION -



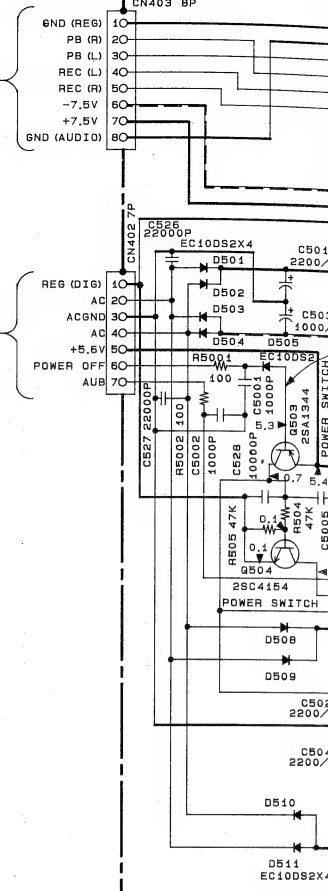
7. SCHEMATIC DIAGRAM - PIN JACK SECTION -

[PINE JACK BOARD]



16

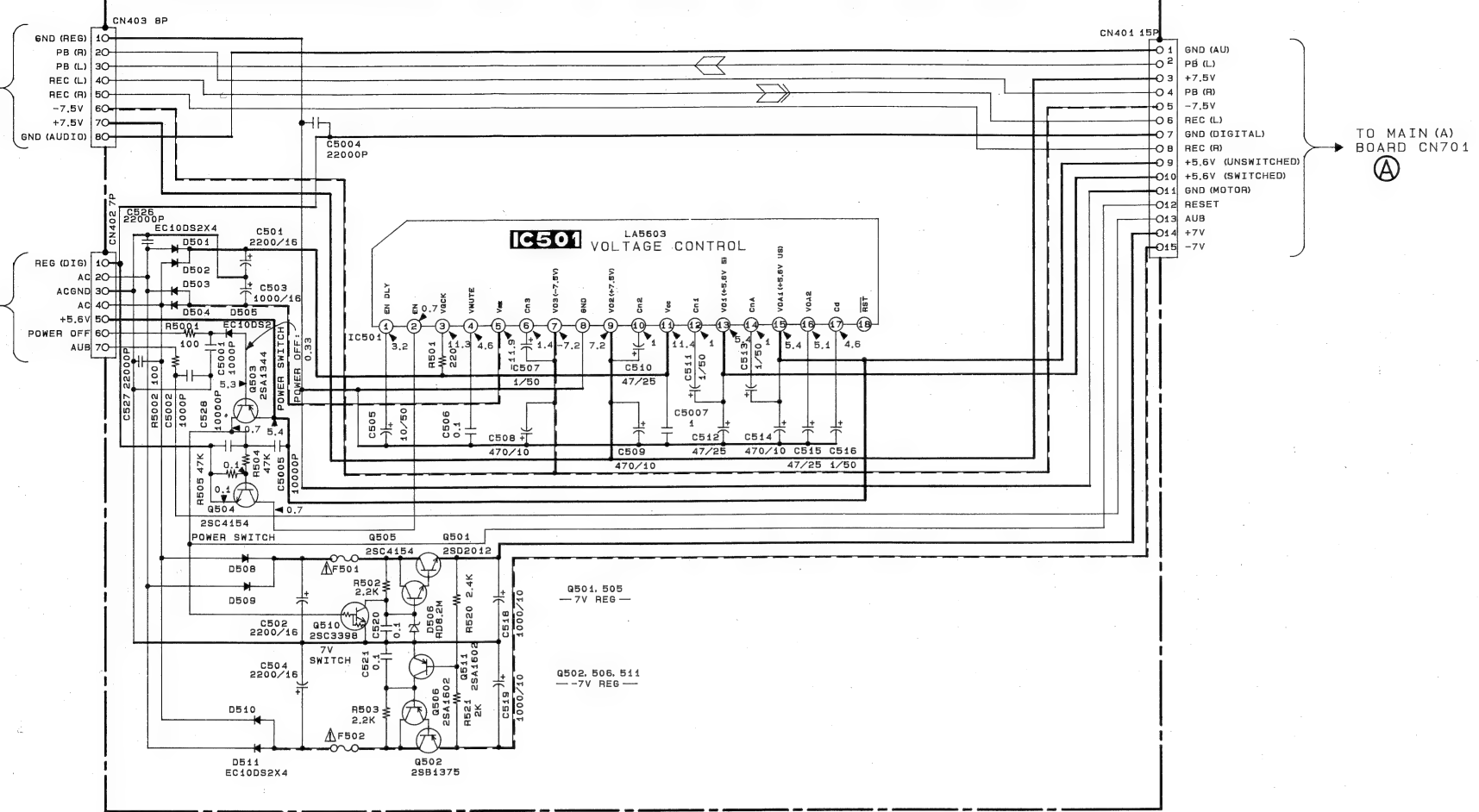
[POWER BO

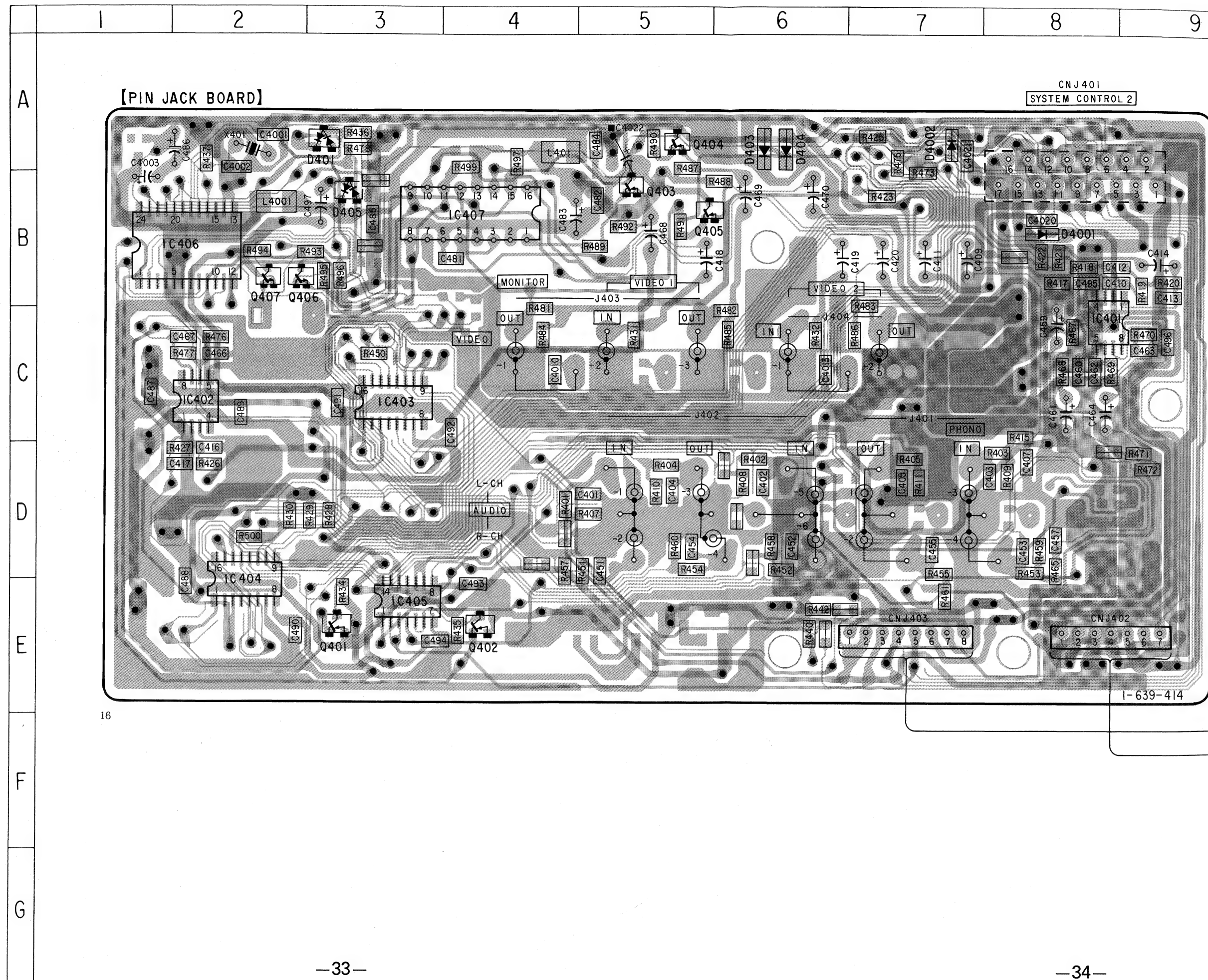


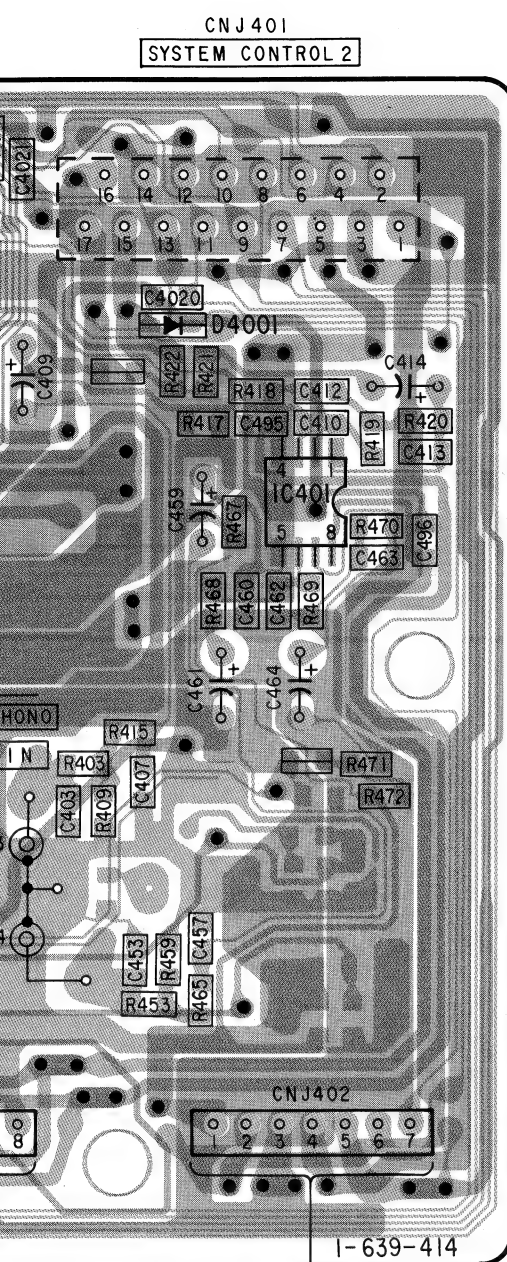
16

【POWER BOARD】

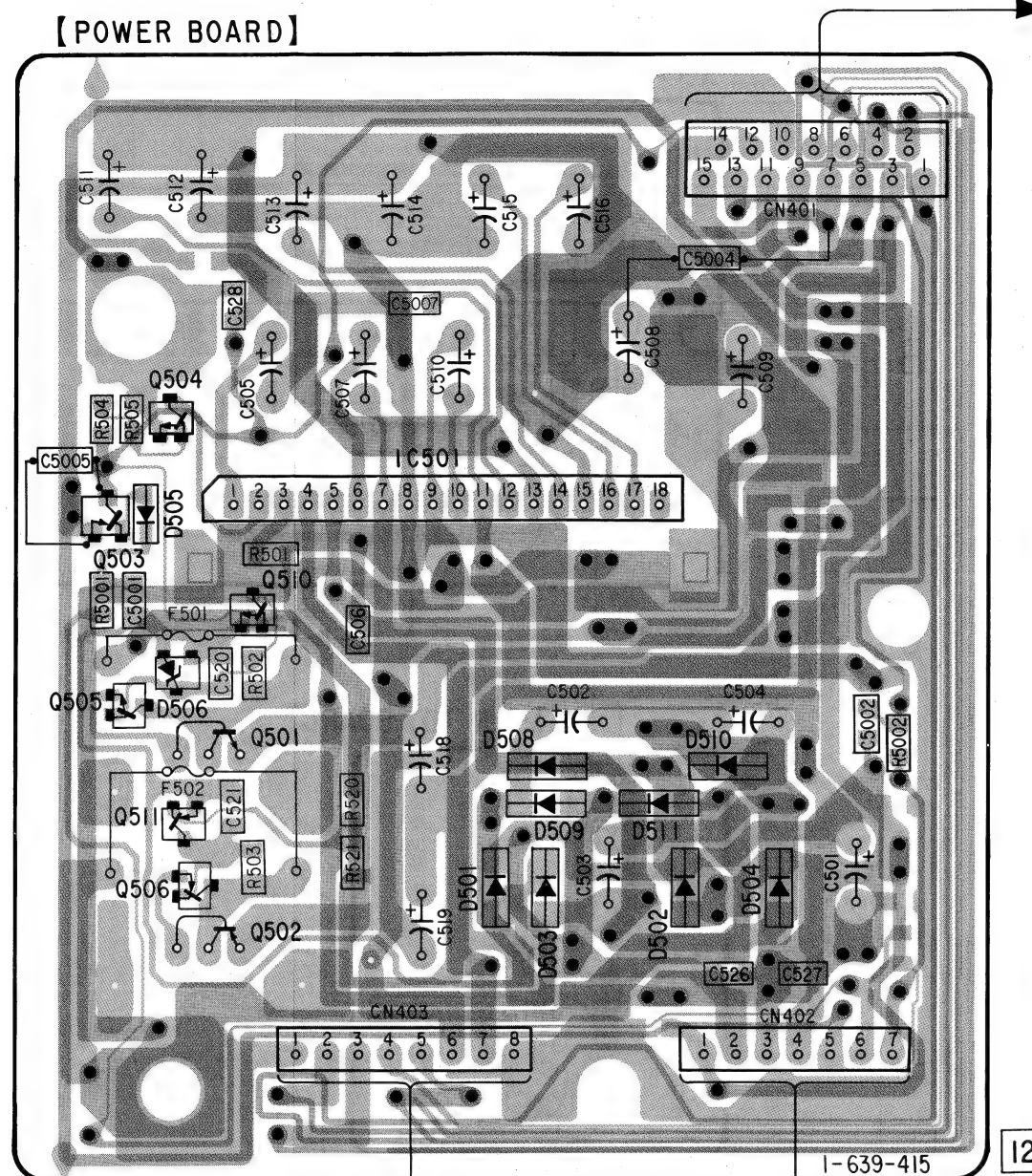
OG
AUB 5.33
POWER OFF 5.2
5.6V 5.4
AC -0.1
AC.G 0
AC -0.1
A.G 0
+7.5V 7.25
-7.5V -7.21
REC R 0
REC L 0
PB L 0
PB R 0
REG.G







12



12

• Semiconductor Location

Ref. No.	Location
D401	A-3
D403	A-6
D404	A-6
D405	B-3
D501	D-12
D502	D-13
D503	D-12
D504	D-13
D505	C-11
D506	C-11
D508	D-12
D509	D-12
D510	D-13
D511	D-12
D4001	B-8
D4002	A-7
IC401	C-8
IC402	C-2
IC403	C-3
IC404	E-2
IC405	E-3
IC406	B-2
IC407	B-4
IC501	C-12
Q401	E-3
Q402	E-4
Q403	B-5
Q404	A-5
Q405	B-5
Q406	B-2
Q407	B-2
Q501	D-11
Q502	D-11
Q503	C-10
Q504	B-11
Q505	D-10
Q506	D-11
Q510	C-11
Q511	D-11

Note on Mounting Diagram:

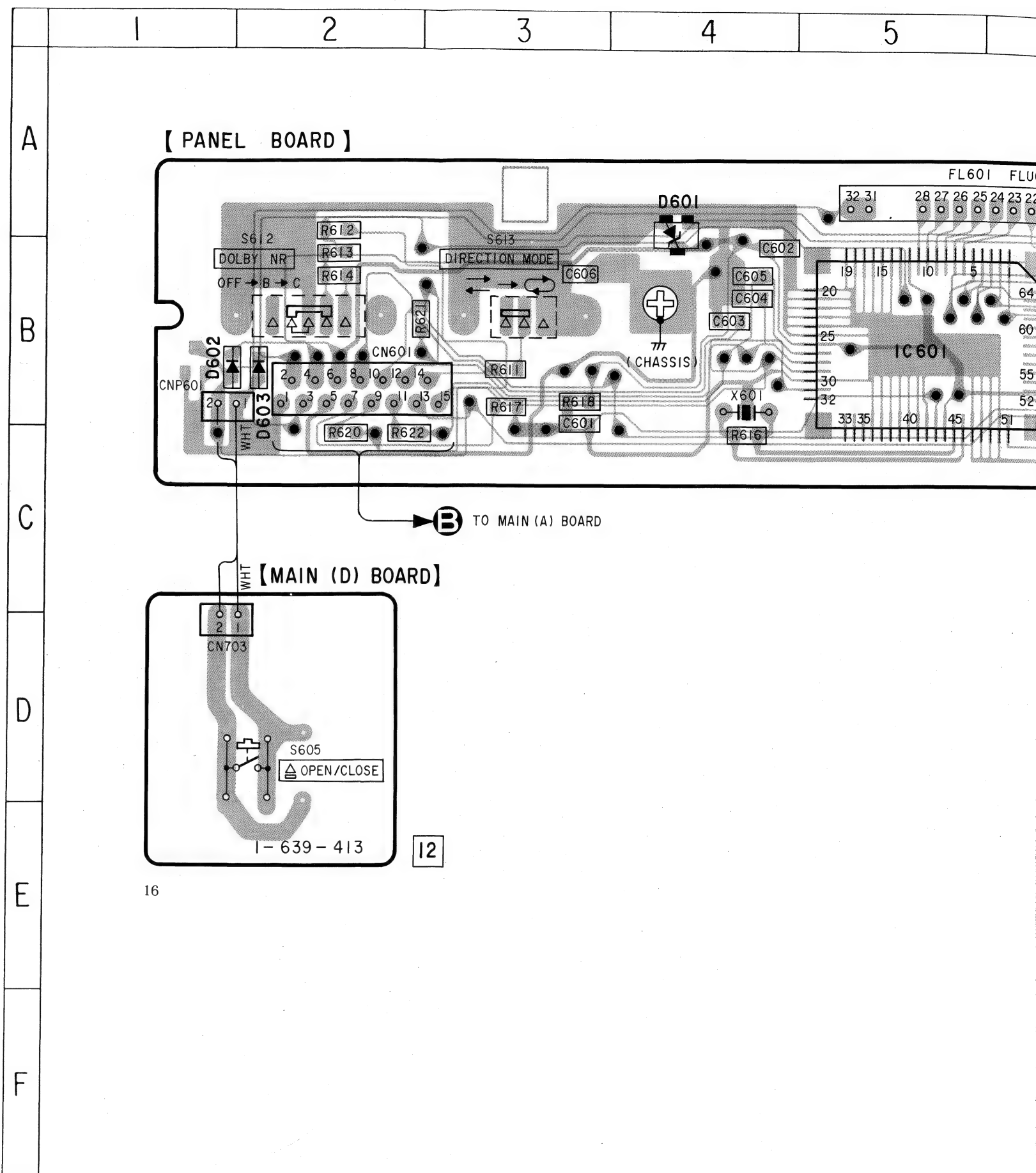
- — : parts extracted from the component side.
- : parts mounted on the conductor side.
- : Through hole.
- ▨ : Pattern on the side which is seen.
- ▩ : Pattern of the rear side.

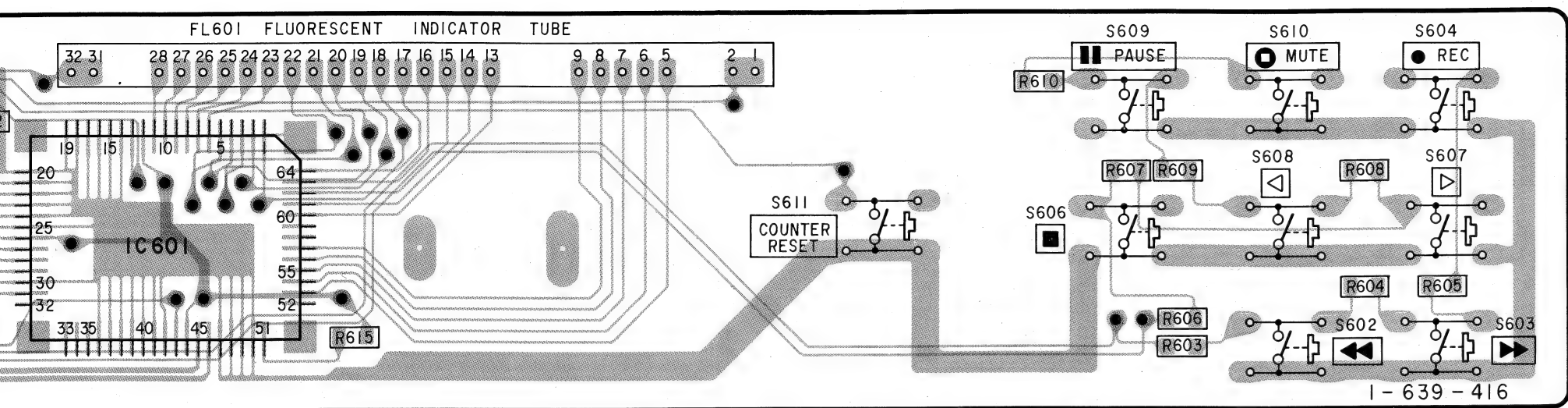
• Semiconductor Location

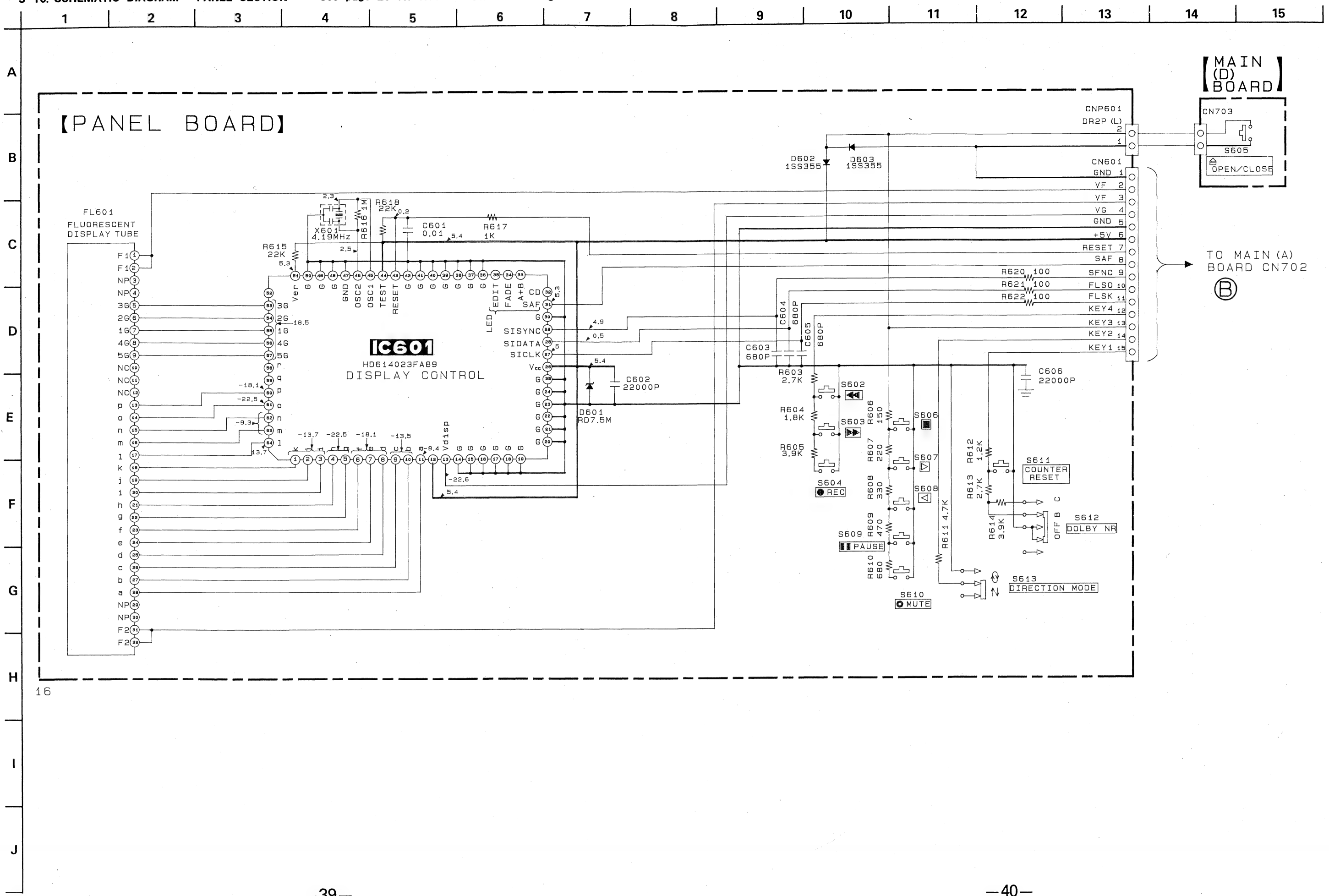
Ref. No.	Location
D601	A-4
D602	B-1
D603	B-2
IC601	B-5

Note on Mounting Diagram:

- : parts extracted from the component side.
- : Through hole.
- ▨ : Pattern on the side which is seen.
- ▩ : Pattern of the rear side.







SECTION 6

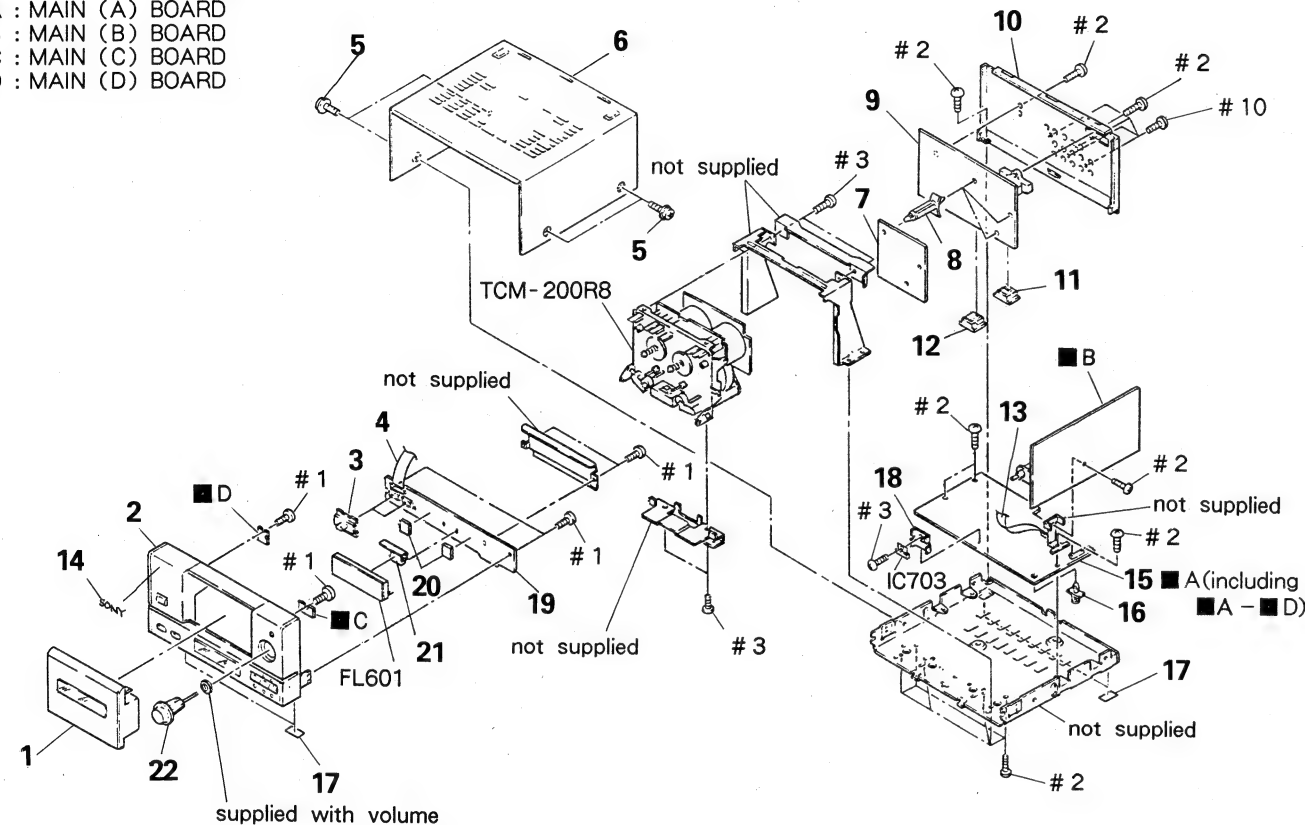
EXPLODED VIEWS

NOTE :

- - XX, - X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
Example :
KNOB, BALANCE (WHITE)...(RED)
 ↑ ↑
 Parts color Cabinet's color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

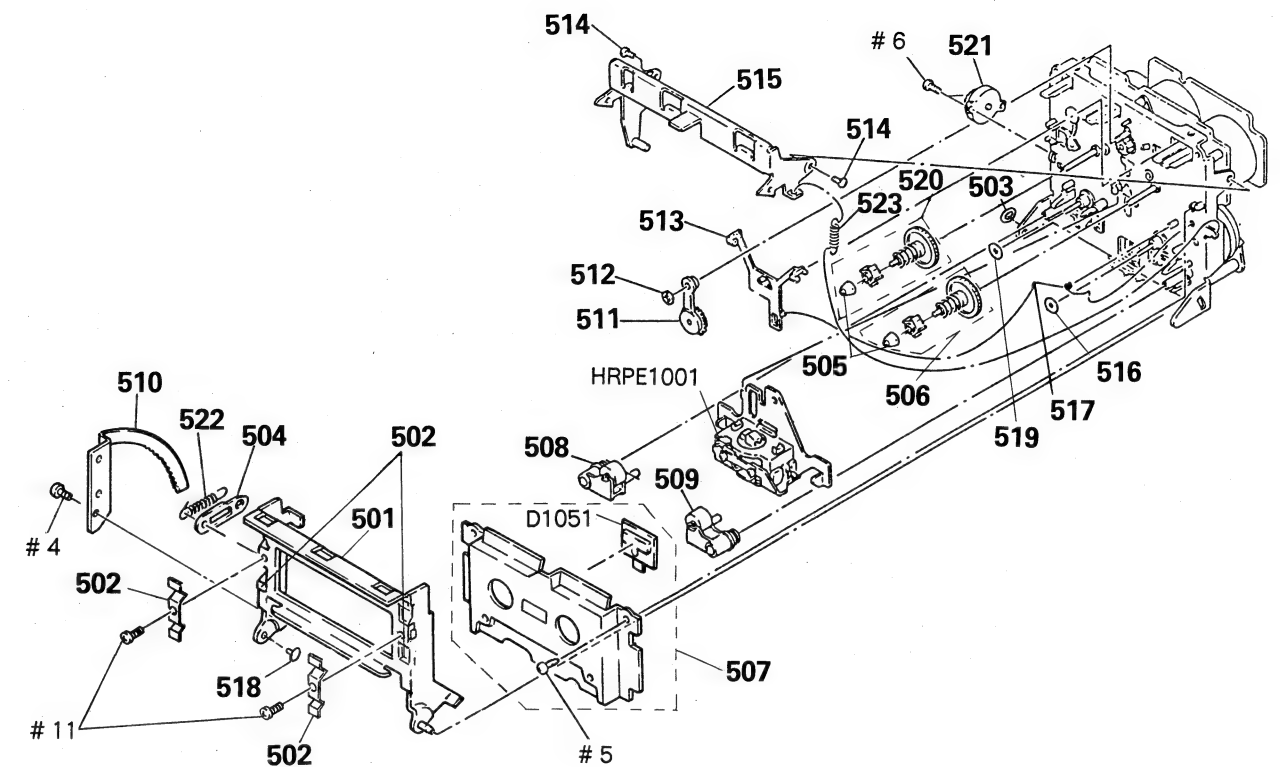
6-1. FRONT PANEL SECTION

- A : MAIN (A) BOARD
- B : MAIN (B) BOARD
- C : MAIN (C) BOARD
- D : MAIN (D) BOARD



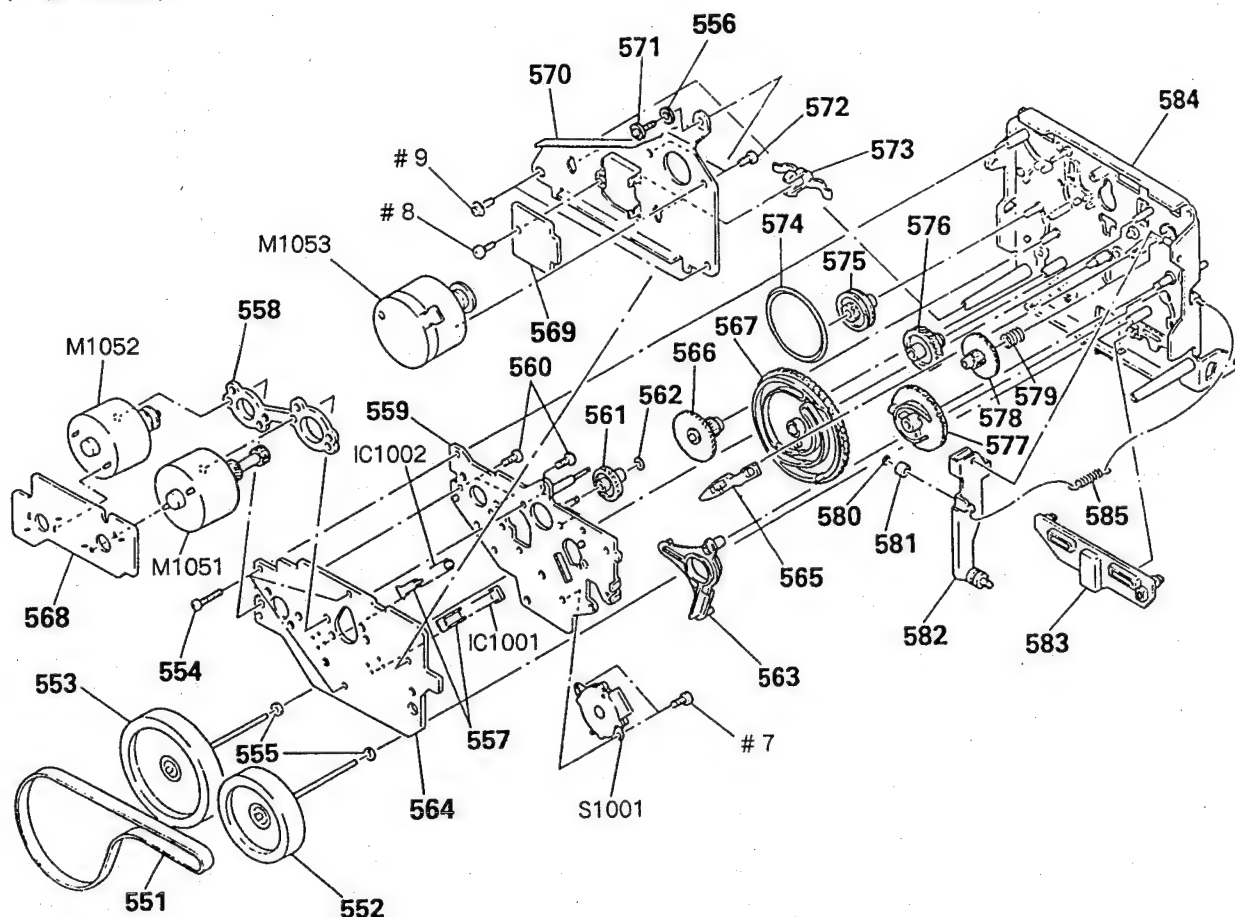
Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	A-2003-769-A	LID ASSY, CASSETTE		13	1-575-664-11	WIRE, FLAT TYPE (15 CORE)	
2	A-2003-768-A	PANEL ASSY, FRONT		14	4-942-636-01	EMBLEM (NO. 3. 5), SONY	
3	3-368-105-01	KNOB (SLIDE)		15	* A-2006-452-A	MAIN BOARD, COMPLETE	
4	1-575-906-11	WIRE, FLAT TYPE (15 CORE)		16	* 3-350-847-31	HOLDER, PCB	
5	3-363-099-01	SCREW (CASE +3X8 TP2)		17	4-930-336-01	FOOT (FELT)	
6	4-932-841-01	CASE		18	* 3-356-925-01	HEAT SINK	
7	* 1-639-415-11	POWER BOARD		19	* A-2006-453-A	PANEL BOARD, COMPLETE	
8	* 3-703-353-02	SUPPORT, PC BOARD		20	* 4-921-941-01	CUSHION (FL)	
9	* A-2006-548-A	PIN JACK BOARD, COMPLETE		21	* 3-368-109-01	HOLDER, FL TUBE	
10	* 3-367-074-01	PANEL, BACK		22	A-2003-767-A	KNOB (REC VOL.) ASSY	
11	* 1-573-188-11	CONNECTOR, BRIDGE 7P		FL601	1-519-656-11	INDICATOR TUBE, FLUORESCENT	
12	* 1-573-389-11	COONECTOR, BRIDGE 8P		IC703	8-759-973-95	IC BA6219B	

6-2. MECHANISM SECTION-1 (TCM-200R8)



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>
501	X-3362-956-1	HOLDER ASSY, CASSETTE		514	3-356-601-11	SCREW, STEP	
502	3-354-908-01	SPRING (CASSETTE RETAINER)		515	* X-3356-608-1	LEVER (LIFTER) ASSY	
503	3-558-708-21	WASHER, STOPPER		516	3-356-713-01	WASHER	
504	* 3-356-717-01	LEVER (JOINT)		517	3-356-619-01	SPRING (B), TORSION	
505	3-362-308-01	CAP (REEL)		518	3-356-710-01	SHAFT (LEFT) (CASSETTE HOLDER)	
506	X-3356-627-1	GEAR (T) ASSY		519	3-356-714-01	WASHER	
507	X-3356-613-1	PLATE ASSY, ORNAMENTAL		520	X-3356-628-1	GEAR (S) ASSY	
508	X-3343-455-1	LEVER (PINCH F) ASSY		521	3-712-786-01	DAMPER, OIL	
509	X-3343-456-1	LEVER (PINCH R) ASSY		522	3-356-626-01	SPRING, TENSION	
510	X-3362-957-1	GEAR ASSY, LOADING		523	3-356-625-01	SPRING, TENSION	
511	X-3356-641-1	LEVER (FR2) ASSY		D1051	8-719-980-85	DIODE SLF-325C	
512	3-669-465-11	WASHER (1.5), STOPPER		HRPE1001	A-2003-772-A	BASE ASSY, HEAD	
513	3-356-614-01	SLIDER (BRAKE)					

6-3. MECHANISM SECTION-2 (TCM-200R8)



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
551	3-356-730-01	BELT (CAPSTAN R2)		571	3-356-707-01	SCREW (+PTPMH 2X25)	
552	X-3356-642-1	FLYWHEEL (R FWD) ASSY		572	4-885-599-00	SCREW, FITTING, REINFORCEMENT	
553	X-3356-643-1	FLYWHEEL (R REV) ASSY		573	3-575-321-00	RETAINER, THRUST, CAPSTAN	
554	3-355-801-01	SCREW (BTP 2X18)		574	3-356-603-01	BELT (MODE)	
555	3-356-705-01	WASHER (CAPSTAN)		575	3-356-607-01	PULLEY (MODE)	
556	* 3-356-718-01	SPACER (THRUST RETAINER R)		576	3-356-703-01	GEAR (COMMUNICATION C)	
557	3-356-631-01	HOLDER (SENSOR)		577	3-356-616-01	GEAR (LOADING CAM)	
558	* 3-356-628-01	SPACER (MOTOR)		578	3-356-609-01	GEAR (LOADING)	
559	* X-3356-602-4	BRACKET (MOTOR R) ASSY		579	3-356-605-01	SPRING, COMPRESSION	
560	3-363-804-01	SCREW (+P 2.6X6.5)		580	3-558-708-11	WASHER, STOPPER	
561	3-356-702-01	GEAR (COMMUNICATION B)		581	3-356-630-01	ROLLER (LOADING)	
562	3-669-465-00	WASHER (1.5), STOPPER		582	* X-3356-606-1	LEVER (LOADING) ASSY	
563	3-356-613-01	LEVER (MODE)		583	3-356-612-01	SLIDER (REVERSE)	
564	* 1-632-740-11	MD BOARD		584	X-3356-634-1	CHASSIS (R2) COMPLETE ASSY, MECH	
565	3-356-617-01	LEVER (SELECTION)		585	3-356-624-01	SPRING, TENSION	
566	3-356-606-01	GEAR (MODE)		IC1001	8-749-920-97	IC PHOTO REFLECTOR GP2S22B	
567	3-356-615-01	GEAR (MODE CAM RR)		IC1002	8-749-920-97	IC PHOTO REFLECTOR GP2S22B	
568	* 1-632-741-11	REEL MOTOR BOARD		M1051	X-3356-638-1	MOTOR (REEL R) ASSY	
569	* 1-634-323-11	TRANSLATION BOARD		M1052	X-3356-604-1	MOTOR (ASSIST) ASSY	
570	* 3-356-629-01	BRACKET (THRUST RETAINER R)		M1053	X-3356-635-1	MOTOR (CAPSTAN R2) ASSY	
				S1001	1-466-525-11	ENCODER, ROTARY	

MAIN

SECTION 7

ELECTRICAL PARTS LIST

NOTE :

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...
- CAPACITORS:
uF: μ F
- COILS
uH: μ H



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
* A-2006-452-A	MAIN BOARD, COMPLETE	*****		C202	1-136-157-00	FILM 0.022uF 5% 50V	
* 1-573-496-11	HOUSING, CONNECTOR 12P			C203	1-124-282-00	ELECT 22uF 20% 25V	
* 1-573-497-11	PIN, CONNECTOR (PC BOARD) 12P			C205	1-136-158-00	FILM 0.027uF 5% 50V	
* 3-356-925-01	HEAT SINK			C206	1-162-294-31	CERAMIC 0.001uF 10% 50V	
7-682-547-04	SCREW +BVT 3X6 (S)			C207	1-124-907-11	ELECT 10uF 20% 50V	
< CAPACITOR >				C208	1-126-233-11	ELECT 22uF 20% 50V	
C101	1-162-294-31	CERAMIC 0.001uF 10% 50V		C209	1-130-475-00	MYLAR 0.0022uF 5% 50V	
C102	1-136-157-00	FILM 0.022uF 5% 50V		C210	1-130-475-00	MYLAR 0.0022uF 5% 50V	
C103	1-124-282-00	ELECT 22uF 20% 25V		C211	1-136-174-00	FILM 0.56uF 5% 50V	
C105	1-136-158-00	FILM 0.027uF 5% 50V		C212	1-136-171-00	FILM 0.33uF 5% 50V	
C106	1-162-294-31	CERAMIC 0.001uF 10% 50V		C213	1-124-907-11	ELECT 10uF 20% 50V	
C107	1-124-907-11	ELECT 10uF 20% 50V		C214	1-124-902-00	ELECT 0.47uF 20% 50V	
C108	1-126-233-11	ELECT 22uF 20% 50V		C215	1-124-927-11	ELECT 4.7uF 20% 100V	
C109	1-130-475-00	MYLAR 0.0022uF 5% 50V		C216	1-124-927-11	ELECT 4.7uF 20% 100V	
C110	1-130-475-00	MYLAR 0.0022uF 5% 50V		C217	1-124-925-11	ELECT 2.2uF 20% 100V	
C111	1-136-174-00	FILM 0.56uF 5% 50V		C218	1-162-285-31	CERAMIC 180PF 10% 50V	
C112	1-136-171-00	FILM 0.33uF 5% 50V		C219	1-136-935-11	FILM 22PF 5% 630V	
C113	1-124-907-11	ELECT 10uF 20% 50V		C220	1-130-468-00	MYLAR 560PF 5% 50V	
C114	1-124-902-00	ELECT 0.47uF 20% 50V		C221	1-136-433-11	FILM 100PF 5% 630V	
C115	1-124-927-11	ELECT 4.7uF 20% 100V		C222	1-136-272-00	FILM 68PF 5% 630V	
C116	1-124-927-11	ELECT 4.7uF 20% 100V		C223	1-136-153-00	FILM 0.01uF 5% 50V	
C117	1-124-925-11	ELECT 2.2uF 20% 100V		C224	1-136-165-00	FILM 0.1uF 5% 50V	
C118	1-162-285-31	CERAMIC 180PF 10% 50V		C225	1-136-157-00	FILM 0.022uF 5% 50V	
C119	1-136-935-11	FILM 22PF 5% 630V		C301	1-124-443-00	ELECT 100uF 20% 10V	
C120	1-130-468-00	MYLAR 560PF 5% 50V		C302	1-124-443-00	ELECT 100uF 20% 10V	
C121	1-136-433-11	FILM 100PF 5% 630V		C303	1-124-907-11	ELECT 10uF 20% 50V	
C122	1-136-272-00	FILM 68PF 5% 630V		C304	1-124-907-11	ELECT 10uF 20% 50V	
C123	1-136-153-00	FILM 0.01uF 5% 50V		C305	1-124-478-11	ELECT 100uF 20% 25V	
C124	1-136-165-00	FILM 0.1uF 5% 50V		C306	1-124-925-11	ELECT 2.2uF 20% 100V	
C125	1-136-157-00	FILM 0.022uF 5% 50V		C307	1-124-902-00	ELECT 0.47uF 20% 50V	
C201	1-162-294-31	CERAMIC 0.001uF 10% 50V		C308	1-162-215-31	CERAMIC 47PF 5% 50V	
				C309	1-161-494-00	CERAMIC 0.022uF 25V	
				C310	1-162-286-31	CERAMIC 220PF 10% 50V	
				C311	1-124-925-11	ELECT 2.2uF 20% 100V	
				C312	1-124-477-11	ELECT 47uF 20% 25V	

Ref. No.	Part No.	Description	Remarks
C313	1-124-902-00	ELECT 0.47uF 20% 50V	
C314	1-124-478-11	ELECT 100uF 20% 25V	
C315	1-124-478-11	ELECT 100uF 20% 25V	
C316	1-130-856-00	FILM 0.0068uF 5% 100V	
C317	1-136-230-00	FILM 0.0022uF 5% 100V	
C318	1-136-230-00	FILM 0.0022uF 5% 100V	
C319	1-124-907-11	ELECT 10uF 20% 50V	
C320	1-161-494-00	CERAMIC 0.022uF 5% 25V	
C321	1-136-558-11	FILM 0.0039uF 5% 630V	
C322	1-107-046-00	MICA 4.7PF 500V	
C701	1-124-443-00	ELECT 100uF 20% 10V	
C702	1-164-159-11	CERAMIC 0.1uF 50V	
C703	1-164-159-11	CERAMIC 0.1uF 50V	
C704	1-164-159-11	CERAMIC 0.1uF 50V	
C705	1-124-443-00	ELECT 100uF 20% 10V	
C706	1-124-925-11	ELECT 2.2uF 20% 100V	
C707	1-164-159-11	CERAMIC 0.1uF 50V	
C708	1-136-165-00	FILM 0.1uF 5% 50V	
C709	1-136-165-00	FILM 0.1uF 5% 50V	
C720	1-164-159-11	CERAMIC 0.1uF 50V	
C750	1-161-494-00	CERAMIC 0.022uF 25V	
C751	1-161-494-00	CERAMIC 0.022uF 25V	
C752	1-161-494-00	CERAMIC 0.022uF 25V	
C753	1-161-494-00	CERAMIC 0.022uF 25V	
C754	1-161-494-00	CERAMIC 0.022uF 25V	
C801	1-124-907-11	ELECT 10uF 20% 50V	
C802	1-136-594-11	FILM 0.018uF 5% 100V	
C803	1-124-907-11	ELECT 10uF 20% 50V	
< CONNECTOR >			
CN701	* 1-568-834-11	SOCKET, CONNECTOR 15P	
CN702	* 1-568-834-11	SOCKET, CONNECTOR 15P	
CNP301	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CNP302	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CNP303	* 1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P	
CNP304	* 1-564-511-11	PLUG, CONNECTOR 8P	
CNP305	* 1-564-518-11	PLUG, CONNECTOR 3P	
CNP702	* 1-564-339-00	PIN, CONNECTOR 5P	
CNP703	* 1-564-505-11	PLUG, CONNECTOR 2P	
< COMPOSITION CIRCUIT BLOCK >			
CP701	1-233-199-11	COMPOSITION CIRCUIT BLOCK	
CP702	1-233-199-11	COMPOSITION CIRCUIT BLOCK	
CP703	1-232-944-11	COMPOSITION CIRCUIT BLOCK	

Ref. No.	Part No.	Description	Remarks
< DIODE >			
D101	8-719-912-20	DIODE 1SS120	
D201	8-719-912-20	DIODE 1SS120	
D301	8-719-912-20	DIODE 1SS120	
D302	8-719-912-20	DIODE 1SS120	
D303	8-719-912-20	DIODE 1SS120	
D304	8-719-933-50	DIODE HZS7C2L	
D305	8-719-912-20	DIODE 1SS120	
D306	8-719-912-20	DIODE 1SS120	
D307	8-719-912-20	DIODE 1SS120	
D308	8-719-912-20	DIODE 1SS120	
D309	8-719-912-20	DIODE 1SS120	
D601	8-719-301-38	DIODE SEL2210S-C(AUTO REC LEVEL)	
D701	8-719-912-20	DIODE 1SS120	
D702	8-719-912-20	DIODE 1SS120	
D703	8-719-933-50	DIODE HZS7C2L	
D704	8-719-933-50	DIODE HZS7C2L	
D705	8-719-933-50	DIODE HZS7C2L	
D706	8-719-933-50	DIODE HZS7C2L	
D707	8-719-933-50	DIODE HZS7C2L	
D708	8-719-933-50	DIODE HZS7C2L	
D709	8-719-933-50	DIODE HZS7C2L	
D710	8-719-933-50	DIODE HZS7C2L	
D711	8-719-933-50	DIODE HZS7C2L	
D712	8-719-933-50	DIODE HZS7C2L	
D713	8-719-912-20	DIODE 1SS120	
D714	8-719-912-20	DIODE 1SS120	
D720	8-719-200-77	DIODE 10E2N	
D721	8-719-200-77	DIODE 10E2N	
D722	8-719-200-77	DIODE 10E2N	
D750	8-719-933-47	DIODE HZS7B2L	
D751	8-719-933-47	DIODE HZS7B2L	
D752	8-719-912-20	DIODE 1SS120	
D753	8-719-912-20	DIODE 1SS120	
D801	8-719-109-89	DIODE RD5.6ESB2	
D802	8-719-200-77	DIODE 10E2N	
D803	8-719-200-77	DIODE 10E2N	
D804	8-719-200-77	DIODE 10E2N	
D805	8-719-200-77	DIODE 10E2N	

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
< IC >							
IC301	8-759-111-44	IC uPC4570C-1		Q310	8-729-900-65	TRANSISTOR DTA144ES	
IC302	8-752-036-34	IC CXA1330S		Q311	8-729-900-61	TRANSISTOR DTA114ES	
IC303	8-752-038-02	IC CXA1198AP		Q312	8-729-900-80	TRANSISTOR DTC114ES	
IC304	8-759-945-58	IC RC4558P		Q313	8-729-900-80	TRANSISTOR DTC114ES	
IC305	8-759-945-58	IC RC4558P		Q314	8-729-900-80	TRANSISTOR DTC114ES	
IC306	8-759-106-56	IC uPC1297CA		Q315	8-729-821-04	TRANSISTOR 2SA1317-STU	
IC701	8-759-633-86	IC M50747-B83SP		Q316	8-729-194-57	TRANSISTOR 2SC945-P	
IC702	8-759-634-79	IC M50944-155SP		Q317	8-729-194-57	TRANSISTOR 2SC945-P	
IC703	8-759-973-95	IC BA6219B		Q318	8-729-900-65	TRANSISTOR DTA144ES	
IC704	8-759-822-09	IC LB1641		Q701	8-729-900-80	TRANSISTOR DTC114ES	
IC705	8-759-240-69	IC TC4069UBP		Q702	8-729-900-80	TRANSISTOR DTC114ES	
IC706	8-759-822-09	IC LB1641		Q703	8-729-900-80	TRANSISTOR DTC114ES	
< COIL >				Q704	8-729-820-24	TRANSISTOR 2SC3330-T	
L101	1-410-780-11	INDUCTOR 27mH		Q705	8-729-820-24	TRANSISTOR 2SC3330-T	
L201	1-410-780-11	INDUCTOR 27mH		Q706	8-729-900-89	TRANSISTOR DTC144ES	
L301	1-408-080-00	INDUCTOR 100uH		Q707	8-729-821-04	TRANSISTOR 2SA1317-STU	
L801	1-410-761-11	INDUCTOR 0.68mH		Q708	8-729-900-61	TRANSISTOR DTA114ES	
L802	1-408-575-11	INDUCTOR 100uH		Q709	8-729-900-61	TRANSISTOR DTA114ES	
L803	1-408-575-11	INDUCTOR 100uH		Q712	8-729-900-65	TRANSISTOR DTA144ES	
< FILTER >				Q713	8-729-900-65	TRANSISTOR DTA144ES	
LPF101	1-236-087-11	FILTER, LOW PASS		Q715	8-729-900-80	TRANSISTOR DTC114ES	
LPF201	1-236-087-11	FILTER, LOW PASS		Q801	8-729-140-96	TRANSISTOR 2SD774-34	
< TRANSISTOR >				Q802	8-729-140-96	TRANSISTOR 2SD774-34	
Q101	8-729-900-89	TRANSISTOR DTC144ES		< RESISTOR >			
Q102	8-729-900-74	TRANSISTOR DTC143TS		R101	1-249-435-11	CARBON 33K 5% 1/4W	
Q103	8-729-821-31	TRANSISTOR 2SD1012-FG		R102	1-249-403-11	CARBON 68 5% 1/4W	
Q201	8-729-900-89	TRANSISTOR DTC144ES		R103	1-247-882-11	CARBON 130K 5% 1/4W	
Q202	8-729-900-74	TRANSISTOR DTC143TS		R104	1-249-426-11	CARBON 5.6K 5% 1/4W	
Q203	8-729-821-31	TRANSISTOR 2SD1012-FG		R105	1-249-420-11	CARBON 1.8K 5% 1/4W	
Q301	8-729-900-65	TRANSISTOR DTA144ES		R107	1-247-887-00	CARBON 220K 5% 1/4W	
Q302	8-729-900-89	TRANSISTOR DTC144ES		R108	1-247-840-00	CARBON 2.4K 5% 1/4W	
Q303	8-729-900-89	TRANSISTOR DTC144ES		R110	1-249-423-11	CARBON 3.3K 5% 1/4W	
Q304	8-729-820-24	TRANSISTOR 2SC3330-T		R111	1-249-428-11	CARBON 8.2K 5% 1/4W	
Q305	8-729-900-89	TRANSISTOR DTC144ES		R112	1-247-864-11	CARBON 24K 5% 1/4W	
Q306	8-729-821-04	TRANSISTOR 2SA1317-STU		R113	1-249-414-11	CARBON 560 5% 1/4W	
Q307	8-729-900-65	TRANSISTOR DTA144ES		R114	1-249-417-11	CARBON 1K 5% 1/4W	
Q308	8-729-900-65	TRANSISTOR DTA144ES		R115	1-247-846-11	CARBON 4.3K 5% 1/4W	
Q309	8-729-900-89	TRANSISTOR DTC144ES		R116	1-249-423-11	CARBON 3.3K 5% 1/4W	
				R117	1-249-417-11	CARBON 1K 5% 1/4W	

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R118	1-249-429-11	CARBON 10K 5% 1/4W		R304	1-249-435-11	CARBON 33K 5% 1/4W	
R119	1-249-425-11	CARBON 4.7K 5% 1/4W		R305	1-249-436-11	CARBON 39K 5% 1/4W	
R120	1-249-421-11	CARBON 2.2K 5% 1/4W		R306	1-247-880-11	CARBON 110K 5% 1/4W	
R121	1-249-429-11	CARBON 10K 5% 1/4W		R307	1-247-885-00	CARBON 180K 5% 1/4W	
R122	1-249-425-11	CARBON 4.7K 5% 1/4W		R308	1-249-436-11	CARBON 39K 5% 1/4W	
R124	1-249-429-11	CARBON 10K 5% 1/4W		R309	1-247-881-00	CARBON 120K 5% 1/4W	
R125	1-249-437-11	CARBON 47K 5% 1/4W		R310	1-247-874-11	CARBON 62K 5% 1/4W	
R126	1-249-431-11	CARBON 15K 5% 1/4W		R311	1-247-872-11	CARBON 51K 5% 1/4W	
R127	1-249-409-11	CARBON 220 5% 1/4W		R312	1-247-889-00	CARBON 270K 5% 1/4W	
R128	1-249-428-11	CARBON 8.2K 5% 1/4W		R313	1-247-883-00	CARBON 150K 5% 1/4W	
R129	1-247-883-00	CARBON 150K 5% 1/4W		R314	1-247-870-11	CARBON 43K 5% 1/4W	
R130	1-249-393-11	CARBON 10 5% 1/4W		R315	1-247-893-11	CARBON 390K 5% 1/4W	
R131	1-249-432-11	CARBON 18K 5% 1/4W		R316	1-249-438-11	CARBON 56K 5% 1/4W	
R132	1-249-439-11	CARBON 10K 5% 1/4W		R317	1-247-872-11	CARBON 51K 5% 1/4W	
R201	1-249-435-11	CARBON 33K 5% 1/4W		R318	1-247-876-11	CARBON 75K 5% 1/4W	
R202	1-249-403-11	CARBON 68 5% 1/4W		R319	1-249-441-11	CARBON 100K 5% 1/4W	
R203	1-247-882-11	CARBON 130K 5% 1/4W		R320	1-249-438-11	CARBON 56K 5% 1/4W	
R204	1-249-426-11	CARBON 5.6K 5% 1/4W		R321	1-247-881-00	CARBON 120K 5% 1/4W	
R205	1-249-420-11	CARBON 1.8K 5% 1/4W		R322	1-249-433-11	CARBON 22K 5% 1/4W	
R207	1-247-887-00	CARBON 220K 5% 1/4W		R323	1-249-409-11	CARBON 220 5% 1/4W	
R208	1-247-840-00	CARBON 2.4K 5% 1/4W		R324	1-249-433-11	CARBON 22K 5% 1/4W	
R210	1-249-423-11	CARBON 3.3K 5% 1/4W		R325	1-249-433-11	CARBON 22K 5% 1/4W	
R211	1-249-428-11	CARBON 8.2K 5% 1/4W		R326	1-249-425-11	CARBON 4.7K 5% 1/4W	
R212	1-247-864-11	CARBON 24K 5% 1/4W		R327	1-247-887-00	CARBON 220K 5% 1/4W	
R213	1-249-414-11	CARBON 560 5% 1/4W		R328	1-249-429-11	CARBON 10K 5% 1/4W	
R215	1-247-846-11	CARBON 4.3K 5% 1/4W		R329	1-249-441-11	CARBON 100K 5% 1/4W	
R216	1-249-423-11	CARBON 3.3K 5% 1/4W		R330	1-249-428-11	CARBON 8.2K 5% 1/4W	
R217	1-249-417-11	CARBON 1K 5% 1/4W		R331	1-249-423-11	CARBON 3.3K 5% 1/4W	
R218	1-249-429-11	CARBON 10K 5% 1/4W		R332	1-249-417-11	CARBON 1K 5% 1/4W	
R219	1-249-425-11	CARBON 4.7K 5% 1/4W		R333	1-249-441-11	CARBON 100K 5% 1/4W	
R220	1-249-421-11	CARBON 2.2K 5% 1/4W		R334	1-249-441-11	CARBON 100K 5% 1/4W	
R221	1-249-429-11	CARBON 10K 5% 1/4W		R335	1-249-419-11	CARBON 1.5K 5% 1/4W	
R222	1-249-425-11	CARBON 4.7K 5% 1/4W		R336	1-247-850-11	CARBON 6.2K 5% 1/4W	
R224	1-249-429-11	CARBON 10K 5% 1/4W		R337	1-249-421-11	CARBON 2.2K 5% 1/4W	
R225	1-249-437-11	CARBON 47K 5% 1/4W		R338	1-249-429-11	CARBON 10K 5% 1/4W	
R226	1-249-431-11	CARBON 15K 5% 1/4W		R339	1-249-429-11	CARBON 10K 5% 1/4W	
R227	1-249-409-11	CARBON 220 5% 1/4W		R340	1-249-437-11	CARBON 47K 5% 1/4W	
R228	1-249-428-11	CARBON 8.2K 5% 1/4W		R341	1-249-437-11	CARBON 47K 5% 1/4W	
R229	1-247-883-00	CARBON 150K 5% 1/4W		R342	△1-212-851-00	FUSIBLE 5.6 5% 1/4W F	
R230	1-249-393-11	CARBON 10 5% 1/4W		R343	1-215-455-00	METAL 27K 1% 1/6W	
R231	1-247-432-11	CARBON 18K 5% 1/4W		R344	1-247-864-11	CARBON 24K 5% 1/4W	
R232	1-249-439-11	CARBON 10K 5% 1/4W		R345	1-249-437-11	CARBON 47K 5% 1/4W	
R301	1-249-409-11	CARBON 220 5% 1/4W		R601	1-249-410-11	CARBON 270 5% 1/4W	
R302	1-249-409-11	CARBON 220 5% 1/4W		R602	1-249-415-11	CARBON 680 5% 1/4W	
R303	1-249-433-11	CARBON 22K 5% 1/4W		R701	1-249-429-11	CARBON 10K 5% 1/4W	

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

MAIN

MD

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R702	1-249-429-11	CARBON	10K 5% 1/4W	R748	1-249-429-11	CARBON	10K 5% 1/4W
R703	1-249-425-11	CARBON	4.7K 5% 1/4W	R749	1-249-429-11	CARBON	10K 5% 1/4W
R704	1-249-425-11	CARBON	4.7K 5% 1/4W	R771	1-249-405-11	CARBON	100 5% 1/4W
R705	1-249-425-11	CARBON	4.7K 5% 1/4W	R772	1-249-405-11	CARBON	100 5% 1/4W
R706	1-247-903-00	CARBON	1M 5% 1/4W	R773	1-249-405-11	CARBON	100 5% 1/4W
R707	1-249-433-11	CARBON	22K 5% 1/4W	R780	1-249-433-11	CARBON	22K 5% 1/4W
R708	1-249-411-11	CARBON	330 5% 1/4W	R801	1-249-431-11	CARBON	15K 5% 1/4W
R709	1-247-830-11	CARBON	910 5% 1/4W	R802	1-249-431-11	CARBON	15K 5% 1/4W
R710	1-249-418-11	CARBON	1.2K 5% 1/4W			< VARIABLE RESISTOR >	
R711	1-249-417-11	CARBON	1K 5% 1/4W	RV101	1-238-597-11	RES, ADJ, CARBON 1K	
R712	△1-212-950-00	FUSIBLE	4.7 5% 1/2W F	RV102	1-238-600-11	RES, ADJ, CARBON 10K	
R713	1-249-421-11	CARBON	2.2K 5% 1/4W	RV103	1-238-601-11	RES, ADJ, CARBON 22K	
R714	1-249-419-11	CARBON	1.5K 5% 1/4W	RV201	1-238-597-11	RES, ADJ, CARBON 1K	
R715	1-249-417-11	CARBON	1K 5% 1/4W	RV202	1-238-600-11	RES, ADJ, CARBON 10K	
R716	△1-212-950-00	FUSIBLE	4.7 5% 1/2W F	RV203	1-238-601-11	RES, ADJ, CARBON 22K	
R717	1-249-436-11	CARBON	39K 5% 1/4W	RV301	1-241-232-11	RES, VAR, CARBON 20K/20K/20K (REC LEVEL)	
R718	1-249-436-11	CARBON	39K 5% 1/4W			< RELAY >	
R719	1-247-887-00	CARBON	220K 5% 1/4W	RY301	1-515-726-11	RELAY	
R720	1-247-887-00	CARBON	220K 5% 1/4W			< SWITCH >	
R721	1-249-425-11	CARBON	4.7K 5% 1/4W	S601	1-554-303-21	SWITCH, TACTILE (AUTO REC LEVEL)	
R722	1-249-425-11	CARBON	4.7K 5% 1/4W	S605	1-554-303-21	SWITCH, TACTILE (△ OPEN/CLOSE)	
R724	1-249-433-11	CARBON	22K 5% 1/4W			< TRANSFORMER >	
R725	1-247-903-00	CARBON	1M 5% 1/4W	T101	1-433-335-11	TRANSFORMER, BIAS OSCILLATION	
R726	1-249-429-11	CARBON	10K 5% 1/4W	T201	1-433-335-11	TRANSFORMER, BIAS OSCILLATION	
R727	1-249-425-11	CARBON	4.7K 5% 1/4W	T301	1-433-336-11	TRANSFORMER, BIAS OSCILLATION	
R728	1-249-425-11	CARBON	4.7K 5% 1/4W	T801	1-450-673-11	TRANSFORMER, DC-DC CONVERTER	
R729	1-249-425-11	CARBON	4.7K 5% 1/4W			< CRYSTAL >	
R730	1-249-433-11	CARBON	22K 5% 1/4W	X701	1-577-358-21	VIBRATOR, CERAMIC 4MHz	
R731	1-249-433-11	CARBON	22K 5% 1/4W	X702	1-577-358-21	VIBRATOR, CERAMIC 4MHz	
R732	1-249-424-11	CARBON	3.9K 5% 1/4W			*****	
R733	1-249-429-11	CARBON	10K 5% 1/4W			* 1-632-740-11 MD BOARD	
R734	1-249-441-11	CARBON	100K 5% 1/4W			*****	
R735	1-249-439-11	CARBON	68K 5% 1/4W			3-356-631-01 HOLDER (SENSOR)	
R736	1-249-417-11	CARBON	1K 5% 1/4W			< CONNECTOR >	
R737	1-249-417-11	CARBON	1K 5% 1/4W	CN1001	1-506-615-11	PIN, CONNECTOR 9P	
R738	△1-212-950-00	FUSIBLE	4.7 5% 1/2W F	CN1002	* 1-564-502-11	PIN, CONNECTOR 10P	
R739	1-249-429-11	CARBON	10K 5% 1/4W				
R740	1-249-429-11	CARBON	10K 5% 1/4W				
R741	1-249-415-11	CARBON	680 5% 1/4W				
R742	1-249-420-11	CARBON	1.8K 5% 1/4W				
R743	1-249-410-11	CARBON	270 5% 1/4W				
R744	1-249-421-11	CARBON	2.2K 5% 1/4W				
R745	1-249-421-11	CARBON	2.2K 5% 1/4W				
R746	1-249-421-11	CARBON	2.2K 5% 1/4W				
R747	1-249-421-11	CARBON	2.2K 5% 1/4W				

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks
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TB1001 *	1-569-066-11	PIN, CONNECTOR 5P	
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< IC >

IC1001	8-749-920-97	IC PHOTO REFLECTOR GP2S22B(SUPPLY REEL)	
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IC1002	8-749-920-97	IC PHOTO REFLECTOR GP2S22B	
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(TAKE UP REEL)

< RESISTOR >

R1001	1-249-408-11	CARBON	180	5%	1/4W
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R1002	1-249-408-11	CARBON	180	5%	1/4W
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< SWITCH >

S1001	1-466-526-11	ENCODER, ROTARY	
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S1002	1-570-953-11	SWITCH, PUSH (1 KEY) (DOOR)	
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S1003	1-571-958-11	SWITCH, PUSH (1 KEY) (CLOSE)	
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S1004	1-572-126-11	SWITCH, PUSH (1 KEY) (OPEN)	
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S1005	1-572-125-11	SWITCH, LEAF (FWD TAB)	
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S1006	1-572-202-11	SWITCH, LEAF (HALF)	
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S1007	1-572-125-11	SWITCH, LEAF (METAL)	
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S1008	1-572-125-11	SWITCH, LEAF (70uS)	
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S1009	1-572-125-11	SWITCH, LEAF (REV TAB)	
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* A-2006-453-A PANEL BOARD, COMPLETE

* 3-368-109-01 HOLDER, FL TUBE

* 4-921-941-01 CUSHION (FL)

< CAPACITOR >

C601	1-164-232-11	CERAMIC CHIP	0.01uF		50V
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C602	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
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C603	1-163-137-00	CERAMIC CHIP	680P	10%	50V
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C604	1-163-137-00	CERAMIC CHIP	680P	10%	50V
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C605	1-163-137-00	CERAMIC CHIP	680P	10%	50V
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C606	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
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< CONNECTOR >

CN601 *	1-568-858-11	SOCKET, CONNECTOR 15P	
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CNP601 *	1-564-495-11	PIN, CONNECTOR 2P	
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< DIODE >

D601	8-719-301-38	DIODE	SEL2210-C
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D602	8-719-988-62	DIODE	1SS355
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Ref. No.	Part No.	Description	Remarks
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D603	8-719-988-62	DIODE 1SS355	
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< INDICATOR >

FL601	1-519-656-11	INDICATOR TUBE, FLUORESCENT	
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< IC >

IC601	8-759-323-62	IC	HD614023FA89
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< RESISTOR >

R603	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
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R604	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
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R605	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
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R606	1-216-029-00	METAL CHIP	150	5%	1/10W
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R607	1-216-033-00	METAL CHIP	220	5%	1/10W
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R608	1-216-037-00	METAL CHIP	330	5%	1/10W
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R609	1-216-041-00	METAL CHIP	470	5%	1/10W
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R610	1-216-045-00	METAL CHIP	680	5%	1/10W
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R611	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
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R612	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
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R613	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
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R614	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
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R615	1-216-081-00	METAL CHIP	22K	5%	1/10W
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R616	1-216-121-00	METAL CHIP	1M	5%	1/10W
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R617	1-216-049-00	METAL CHIP	1K	5%	1/10W
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R618	1-216-081-00	METAL CHIP	22K	5%	1/10W
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R620	1-216-025-00	METAL CHIP	100	5%	1/10W
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R621	1-216-025-00	METAL CHIP	100	5%	1/10W
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R622	1-216-025-00	METAL CHIP	100	5%	1/10W
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< SWITCH >

S602	1-554-303-21	SWITCH, TACTILE (< < <)	
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S603	1-554-303-21	SWITCH, TACTILE (> > >)	
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S604	1-554-303-21	SWITCH, TACTILE (• REC)	
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S606	1-554-303-21	SWITCH, TACTILE (□)	
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S607	1-554-303-21	SWITCH, TACTILE (▷)	
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S608	1-554-303-21	SWITCH, TACTILE (< <)	
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S609	1-554-303-21	SWITCH, TACTILE (■ PAUSE)	
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S610	1-554-303-21	SWITCH, TACTILE (● MUTE)	
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S611	1-554-303-21	SWITCH, TACTILE (COUNTER RESET)	
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S612	1-570-834-11	SWITCH, SLIDE (DOLBY NR)	
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S613	1-570-842-11	SWITCH, SLIDE (DIRECTION MODE)	
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< CRYSTAL >

X601	1-577-359-21	VIBRATOR, CERAMIC 4.19MHz	
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PIN JACK

Ref. No.	Part No.	Description	Remarks
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* A-2006-548-A PIN JACK BOARD, COMPLETE

< CAPACITOR >

C401	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C402	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C403	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C404	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C405	1-163-003-11	CERAMIC CHIP	330PF	10%	50V

C407	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C409	1-124-465-00	ELECT	0.47uF	20%	50V
C410	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C411	1-126-163-11	ELECT	4.7uF	20%	50V
C412	1-163-018-00	CERAMIC CHIP	0.0056uF	5%	50V

C413	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C414	1-124-257-00	ELECT	2.2uF	20%	50V
C416	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C417	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C418	1-126-157-11	ELECT	10uF	20%	16V

C419	1-126-157-11	ELECT	10uF	20%	16V
C451	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C452	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C453	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C454	1-163-003-11	CERAMIC CHIP	330PF	10%	50V

C455	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C457	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C459	1-124-465-00	ELECT	0.47uF	20%	50V
C460	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C461	1-126-163-11	ELECT	4.7uF	20%	50V

C462	1-163-018-00	CERAMIC CHIP	0.0056uF	5%	50V
C463	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C464	1-124-257-00	ELECT	2.2uF	20%	50V
C466	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C467	1-163-117-00	CERAMIC CHIP	100PF	5%	50V

C468	1-126-012-11	ELECT	470uF	20%	16V
C469	1-126-012-11	ELECT	470uF	20%	16V
C470	1-126-012-11	ELECT	470uF	20%	16V
C481	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C482	1-164-232-11	CERAMIC CHIP	0.01uF		50V

C483	1-126-177-11	ELECT	100uF	20%	10V
C484	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C485	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C486	1-126-157-11	ELECT	10uF	20%	16V

Ref. No.	Part No.	Description	Remarks
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C487	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C488	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C489	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C490	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C491	1-164-232-11	CERAMIC CHIP	0.01uF	50V

C492	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C493	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C494	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C495	1-164-232-11	CERAMIC CHIP	0.01uF	50V
C496	1-164-232-11	CERAMIC CHIP	0.01uF	50V

C497	1-126-301-11	ELECT	1uF	20%	50V
C4001	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C4002	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C4003	1-124-589-11	ELECT	47uF	20%	16V
C4010	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V

C4013	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C4020	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C4021	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C4022	1-124-589-11	ELECT	47uF	20%	16V

< CONNECTOR >

CN401	* 1-568-834-11	SOCKET, CONNECTOR 15P
CNJ401	* 1-580-740-11	SOCKET, CONNECTOR 17P
CNJ402	* 1-573-187-11	PIN, CONNECTOR (PC BOARD) 7P
CNJ403	* 1-573-388-11	PIN, CONNECTOR (PC BOARD) 8P

< DIODE >

D401	8-719-990-36	DIODE	DCA010
D403	8-719-210-33	DIODE	EC10DS2
D404	8-719-210-33	DIODE	EC10DS2
D405	8-719-990-36	DIODE	DCA010
D4001	8-719-988-62	DIODE	1SS355

D4002	8-719-988-62	DIODE	1SS355
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< IC >



IC401	8-759-636-55	IC	M5218AFP
IC402	8-759-636-55	IC	M5218AFP
IC403	8-759-009-05	IC	MC14051BF
IC404	8-759-009-05	IC	MC14051BF
IC405	8-759-516-47	IC	CD4066BCM
IC406	8-759-636-35	IC	M50760-315FP
IC407	8-759-991-77	IC	BA7625

PIN JACK

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
< JACK >							
J401	1-565-304-11	JACK, PIN 4P (AUDIO)		R415	1-216-049-00	METAL CHIP 1K 5% 1/10W	
J402	* 1-569-812-11	JACK, PIN 6P (AUDIO)		R417	1-216-089-00	METAL CHIP 47K 5% 1/10W	
J403	1-565-933-11	JACK, PIN 3P (VIDEO)		R418	1-216-049-00	METAL CHIP 1K 5% 1/10W	
J404	1-573-144-11	JACK, PIN 2P (VIDEO)		R419	1-216-115-00	METAL CHIP 560K 5% 1/10W	
< JUMPER >				R420	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW2	1-216-295-00	METAL CHIP 0 5% 1/10W		R421	1-216-001-00	METAL CHIP 10 5% 1/10W	
JW3	1-216-295-00	METAL CHIP 0 5% 1/10W		R422	1-216-075-00	METAL CHIP 12K 5% 1/10W	
JW8	1-216-295-00	METAL CHIP 0 5% 1/10W		R423	1-216-041-00	METAL CHIP 470 5% 1/10W	
JW10	1-216-295-00	METAL CHIP 0 5% 1/10W		R425	1-216-025-00	METAL CHIP 100 5% 1/10W	
JW12	1-216-295-00	METAL CHIP 0 5% 1/10W		R426	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW413	1-216-295-00	METAL CHIP 0 5% 1/10W		R427	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW414	1-216-295-00	METAL CHIP 0 5% 1/10W		R428	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW439	1-216-295-00	METAL CHIP 0 5% 1/10W		R429	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW441	1-216-295-00	METAL CHIP 0 5% 1/10W		R430	1-216-089-00	METAL CHIP 47K 5% 1/10W	
JW463	1-216-295-00	METAL CHIP 0 5% 1/10W		R431	1-216-022-00	METAL CHIP 75 5% 1/10W	
JW464	1-216-295-00	METAL CHIP 0 5% 1/10W		R432	1-216-022-00	METAL CHIP 75 5% 1/10W	
< COIL >				R434	1-216-073-00	METAL CHIP 10K 5% 1/10W	
L401	1-408-789-21	INDUCTOR, CHIP 100uH		R435	1-216-073-00	METAL CHIP 10K 5% 1/10W	
L4001	1-408-777-00	INDUCTOR, CHIP 10uF		R436	1-216-089-00	METAL CHIP 47K 5% 1/10W	
< TRANSISTOR >				R437	1-216-121-00	METAL CHIP 1M 5% 1/10W	
Q401	8-729-805-65	TRANSISTOR 2SA1344		R440	1-216-089-00	METAL CHIP 47K 5% 1/10W	
Q402	8-729-805-65	TRANSISTOR 2SA1344		R442	1-216-089-00	METAL CHIP 47K 5% 1/10W	
Q403	8-729-602-36	TRANSISTOR 2SA1602-F		R450	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
Q404	8-729-602-36	TRANSISTOR 2SA1602-F		R451	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q405	8-729-602-36	TRANSISTOR 2SA1602-F		R452	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q406	8-729-602-36	TRANSISTOR 2SA1602-F		R453	1-216-049-00	METAL CHIP 1K 5% 1/10W	
Q407	8-729-602-21	TRANSISTOR 2SC4154-F		R454	1-216-041-00	METAL CHIP 470 5% 1/10W	
< RESISTOR >				R455	1-216-041-00	METAL CHIP 470 5% 1/10W	
R401	1-216-049-00	METAL CHIP 1K 5% 1/10W		R457	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R402	1-216-049-00	METAL CHIP 1K 5% 1/10W		R458	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R403	1-216-049-00	METAL CHIP 1K 5% 1/10W		R459	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R404	1-216-041-00	METAL CHIP 470 5% 1/10W		R460	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R405	1-216-041-00	METAL CHIP 470 5% 1/10W		R461	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R407	1-216-115-00	METAL CHIP 560K 5% 1/10W		R465	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R408	1-216-115-00	METAL CHIP 560K 5% 1/10W		R467	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R409	1-216-115-00	METAL CHIP 560K 5% 1/10W		R468	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R410	1-216-115-00	METAL CHIP 560K 5% 1/10W		R469	1-216-115-00	METAL CHIP 560K 5% 1/10W	
R411	1-216-115-00	METAL CHIP 560K 5% 1/10W		R470	1-216-089-00	METAL CHIP 47K 5% 1/10W	
				R471	1-216-001-00	METAL CHIP 10 5% 1/10W	
				R472	1-216-075-00	METAL CHIP 12K 5% 1/10W	
				R473	1-216-041-00	METAL CHIP 470 5% 1/10W	
				R475	1-216-025-00	METAL CHIP 100 5% 1/10W	
				R476	1-216-089-00	METAL CHIP 47K 5% 1/10W	
				R477	1-216-089-00	METAL CHIP 47K 5% 1/10W	
				R478	1-216-089-00	METAL CHIP 47K 5% 1/10W	

PIN JACK POWER

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R481	1-216-022-00	METAL CHIP	75 5% 1/10W	C516	1-124-903-11	ELECT	1uF 20% 50V
R482	1-216-022-00	METAL CHIP	75 5% 1/10W	C518	1-124-473-11	ELECT	1000uF 20% 10V
R483	1-216-022-00	METAL CHIP	75 5% 1/10W	C519	1-124-473-11	ELECT	1000uF 20% 10V
R484	1-216-049-00	METAL CHIP	1K 5% 1/10W	C520	1-163-038-00	CERAMIC CHIP	0.1uF 25V
R485	1-216-049-00	METAL CHIP	1K 5% 1/10W	C521	1-163-038-00	CERAMIC CHIP	0.1uF 25V
R486	1-216-049-00	METAL CHIP	1K 5% 1/10W	C526	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V
R487	1-216-029-00	METAL CHIP	150 5% 1/10W	C527	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V
R488	1-216-029-00	METAL CHIP	150 5% 1/10W	C528	1-164-232-11	CERAMIC CHIP	0.01uF 10% 50V
R489	1-216-031-00	METAL CHIP	180 5% 1/10W	C5001	1-163-009-11	CERAMIC CHIP	1000P 10% 50V
R490	1-216-031-00	METAL CHIP	180 5% 1/10W	C5002	1-163-009-11	CERAMIC CHIP	1000P 10% 50V
R491	1-216-031-00	METAL CHIP	180 5% 1/10W	C5004	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V
R492	1-216-029-00	METAL CHIP	150 5% 1/10W	C5005	1-164-232-11	CERAMIC CHIP	0.01uF 10% 50V
R493	1-216-073-00	METAL CHIP	10K 5% 1/10W	C5007	1-164-346-11	CERAMIC CHIP	1uF 16V
R494	1-216-073-00	METAL CHIP	10K 5% 1/10W				
R495	1-216-081-00	METAL CHIP	22K 5% 1/10W			(CONNECTOR)	
R496	1-216-081-00	METAL CHIP	22K 5% 1/10W	CN402	* 1-573-187-11	PIN, CONNECTOR (PC BOARD) 7P	
R497	1-216-073-00	METAL CHIP	10K 5% 1/10W	CN403	* 1-573-388-11	PIN, CONNECTOR (PC BOARD) 8P	
R499	1-216-073-00	METAL CHIP	10K 5% 1/10W				
R500	1-216-065-00	METAL CHIP	4.7K 5% 1/10W			(DIODE)	
		(CRYSTAL)		D501	8-719-210-33	DIODE EC10DS2	
X401	1-577-077-11	OSCILLATOR, CERAMIC 400KHz		D502	8-719-210-33	DIODE EC10DS2	
				D503	8-719-210-33	DIODE EC10DS2	
				D504	8-719-210-33	DIODE EC10DS2	
				D505	8-719-988-62	DIODE 1SS355	
				D506	8-719-106-36	DIODE RD8.2M-B3	
				D508	8-719-210-33	DIODE EC10DS2	
				D509	8-719-210-33	DIODE EC10DS2	
				D510	8-719-210-33	DIODE EC10DS2	
				D511	8-719-210-33	DIODE EC10DS2	
						(FUSE)	
				F501	△1-532-843-21	FUSE 2.5A	
				F502	△1-532-843-21	FUSE 2.5A	
						(IC)	
				IC501	8-759-823-46	IC LA5603	
						(TRANSISTOR)	
				Q501	8-729-209-15	TRANSISTOR 2SD2012	
				Q502	8-729-111-67	TRANSISTOR 2SB1094-L	
				Q503	8-729-805-65	TRANSISTOR 2SA1344	
				Q504	8-729-602-21	TRANSISTOR 2SC4154-F	
				Q505	8-729-602-21	TRANSISTOR 2SC4154-F	

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

POWER

REEL MOTOR

TRANSLATION

Ref. No.	Part No.	Description	Remarks
Q506	8-729-602-36	TRANSISTOR 2SA1602-EF	
Q510	8-729-805-49	TRANSISTOR 2SC3398	
Q511	8-729-602-36	TRANSISTOR 2SA1602-EF	

< RESISTOR >

R501	1-216-033-00	METAL CHIP	220	5%	1/10W
R502	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R503	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R504	1-216-089-00	METAL CHIP	47K	5%	1/10W
R505	1-216-089-00	METAL CHIP	47K	5%	1/10W
R520	1-216-058-00	METAL CHIP	2.4K	5%	1/10W
R521	1-216-056-00	METAL CHIP	2K	5%	1/10W
R5001	1-216-025-00	METAL CHIP	100	5%	1/10W
R5002	1-216-025-00	METAL CHIP	100	5%	1/10W

* 1-632-741-11 REEL MOTOR BOARD

< CAPACITOR >

C1051	1-124-907-11	ELECT	10uF	20%	50V
C1052	1-124-907-11	ELECT	10uF	20%	50V
C1053	1-164-159-11	CERAMIC	0.1uF		50V

< CONNECTOR >

CN1051	* 1-564-499-11	PIN, CONNECTOR 6P
CN1052	* 1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P
CN1053	* 1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P

< RESISTOR >

R1051	1-249-414-11	CARBON	560	5%	1/4W
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* 1-634-323-11 TRANSLATION BOARD

< CONNECTOR >

CN1091	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P
CN1092	* 1-564-509-11	PLUG, CONNECTOR 6P

Ref. No.	Part No.	Description	Remarks
		MISCELLANEOUS	

4	1-575-906-11	WIRE, FLAT TYPE (15 CORE)	
11	* 1-573-188-11	CONNECTOR, BRIDGE 7P	
12	* 1-573-389-11	COONECTOR, BRIDGE 8P	
13	1-575-664-11	WIRE, FLAT TYPE (15 CORE)	
D1051	8-719-980-85	DIODE SLF-325C	
HRPE1001	A-2003-772-A	BASE ASSY, HEAD	
IC1001	8-749-920-97	IC PHOTO REFLECTOR GP2S22B	
IC1002	8-749-920-97	IC PHOTO REFLECTOR GP2S22B	
M1051	X-3356-638-1	MOTOR (REEL R) ASSY	
M1052	X-3356-604-1	MOTOR (ASSIST) ASSY	
M1053	X-3356-635-1	MOTOR (CAPSTAN R2) ASSY	
S1001	1-466-525-11	ENCODER, ROTARY	

HARDWARE LIST

# 1	7-621-773-93	SCREW (PANEL 2.6 TP2)
# 2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
# 3	7-682-547-04	SCREW +BVTT 3X6 (S)
# 4	7-621-283-00	SCREW +BVTT 2X5 (S)
# 5	7-685-133-19	SCREW +BTP 2.6X6 TYPE2 N-S
# 6	7-621-255-20	SCREW +BVTT 2X4 (S)
# 7	7-621-255-35	SCREW +BVTT 2X5 (S)
# 8	7-621-770-67	SCREW +BVTT 2.6X6 (S)
# 9	7-685-131-19	SCREW +BTP 2.6X4 TYPE2 N-S
#10	7-621-849-00	SCREW (BV/RING)
# 11	7-621-255-15	SCREW +PTT 2X3 (S)